

SERVICE MANUAL

BE-3D CHASSIS

MODEL	COMMANDER	DEST	CHASSIS NO.	MODEL	COMMANDER	DEST	CHASSIS NO.
KV-29FX11A	RM-886	Italian	SCC-K05S-A	KV-29FX11K	RM-886	OIRT	SCC-K20K-A
KV-29FX11B	RM-886	French	SCC-K01U-A	KV-29FX11R	RM-886	OIRT	SCC-K20L-A
KV-29FX11D	RM-886	AEP	SCC-K07U-A	KV-29FX11U	RM-886	UK	SCC-K04Q-A
KV-29FX11E	RM-886	Spanish	SCC-K06U-A				



TRINITRON® COLOR TV
SONY®







KV-29FX11

ITEM MODEL	Television System	Stereo System	Channel Coverage	Color System
Italian	B/G/H	GERMAN Stereo	ITALIA VHF : A-H2 (C) UHF : 21-69 PAL B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
French	B/G/H, D/K, L, I	GERMAN/NICAM Stereo	L VHF : F02-F10 UHF : F21-F60 CABLE : B-Q B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF : A-H2 (C) UHF : 21-69 I UHF : B21-B69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
AEP	B/G/H	GERMAN Stereo	PAL B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF : A-H2 (C) UHF : 21-69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Spanish	B/G/H, D/K	GERMAN/NICAM Stereo	PAL B/G VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF : A-H2 (C) UHF : 21-69 D/K VHF : R01-R12 UHF : R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
OIRT	B/G/H, D/K	KV-29FX11K GERMAN/NICAM Stereo KV-29FX11R GERMAN Stereo	B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 D/K VHF : R01-R12 UHF : R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
UK	I	NICAM Stereo	UHF : B21-B69	PAL NTSC4.43, NTSC3.58 (VIDEO IN)

MODEL	29FX11A	29FX11B	29FX11D	29FX11E	29FX11K	29FX11R	29FX11U
Power Consumption	89.3 W	98.5 W	98.5 W	98.5 W	98.5 W	98.5 W	149.5 W




[PICTURE TUBE] Super Trinitron
Approx. 72cm (29 inches)
(Approx. 68 cm picture measured diagonally)
110 degree deflection

[FRONT]

-  Video input - phono jack
-  Audio inputs - phono jacks
-  S Video input 4 pin DIN
-  Headphone jacks : stereo minijack

Input/Output Terminals

[REAR]

-  1 21-pin Euro connector (CENELEC standard).
- Inputs for Audio and Video signals.
- Inputs for RGB.
- Outputs of TV Video and Audio signals.
-  2 21-pin Euro connector.
- inputs for Audio and Video signals.
- inputs for S Video.
- outputs for Audio and Video signals (selectable).
-  Phono Jack
- Outputs for Audio Signals

Sound output

- Left/Right 2x15W (Music Power)
- Subwoofer 2x30W (Music Power)
- Power requirements 220 - 240V
- Dimensions Approx 746x569x526mm
- Weight Approx 51kg
- Supplied accessories RM-886 Remote Commander (1)
IEC designated R6 battery (2)
- Other features 2-Way Speaker, NICAM*, FASTEXT, TOPTXT
*(KV-29FX11B/29FX11E/29FX11K/
KV-29FX11U only)


[RM-886]

- Remote control system infrared control
- Power requirements 3V dc
2 batteries IEC designation R6 (size AA)
- Dimensions Approx 65x225x21mm (w/h/d)
- Weight Approx 157g (Not including battery)

Design and specifications are subject to change without notice.

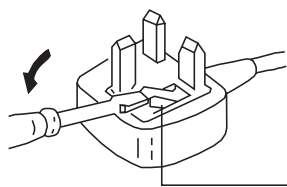
Model Name Item	KV-29FX11A	KV-29FX11B	KV-29FX11D	KV-29FX11E	KV-29FX11K	KV-29FX11R	KV-29XF11U
Pal Comb	OFF	OFF	OFF	OFF	OFF	OFF	OFF
PIP	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Woofer Box	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Scart 1	ON	ON	ON	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON	ON	ON	ON
Front in (3)	ON	ON	ON	ON	ON	ON	ON
Scart 4	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Projector	OFF	OFF	OFF	OFF	OFF	OFF	OFF
AKB in 16:9 mode	ON	ON	ON	ON	ON	ON	ON
Norm B/G/H	ON	ON	ON	ON	ON	ON	OFF
Norm I	OFF	ON	OFF	OFF	OFF	OFF	ON
Norm D/K	OFF	ON	OFF	ON	ON	ON	OFF
Norm AUS	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Norm L	OFF	ON	OFF	OFF	OFF	OFF	OFF
Norm SAT	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Norm M	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Teletext	ON	ON	ON	ON	ON	ON	ON
Nicam Stereo	OFF	ON	OFF	ON	ON	OFF	ON
Language Preset	Italian	French	German	Spanish	OIRT	OIRT	English

WARNING (KV-29FX11U only)

The flexible mains lead is supplied connected to a **B.S. 1363** fused plug having a fuse of **5 AMP** capacity. Should the fuse need to be replaced, use a **5 AMP FUSE** approved by **ASTA** to **BS 1362**, ie one that carries the  mark.

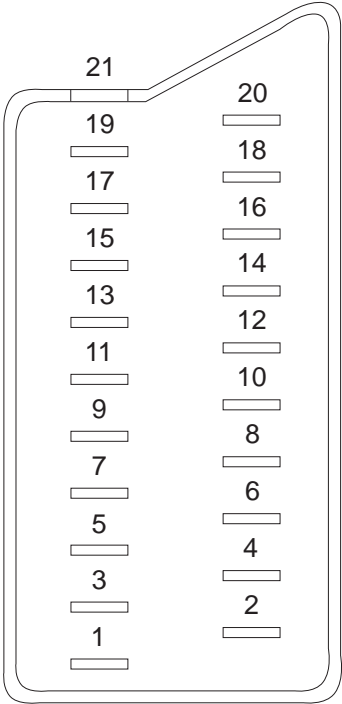
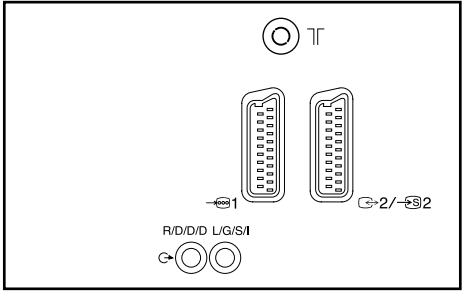
IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOR THE OUTLET SOCKETS IN YOUR HOME, IT SHOULD BE CUT OFF AND AN APPROPRIATE PLUG FITTED. THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE OUTLET SOCKET.

When an alternative type of plug is used it should be fitted with a **5 AMP FUSE**, otherwise the circuit should be protected by a **5 AMP FUSE** at the distribution board.



How to replace the fuse.
Open the fuse compartment with a screwdriver blade and replace the fuse.

21 pin connector (→1, ↔2 / →S2)



Pin No	1	2	4	Signal	Signal level
1	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
2	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedance : More than 10kohm*
3	○	○	○	Audio output A (left)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
4	○	○	○	Ground (audio)	
5	○	○	○	Ground (blue)	
6	○	○	○	Audio input A (left)	Standard level : 0.5V rms Output impedance : More than 10kohm*
7	○	●	●	Blue input	0.7 +/- 3dB, 75 ohms positive
8	○	○	○	Function select (AV control)	High state (9.5-12V) : Part mode Low state (0-2V) : TV mode Input impedance : More than 10K ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (green)	
10	○	○	○	Open	
11	○	●	●	Green	Green signal : 0.7 +/- 3dB, 75 ohms, positive
12	○	○	○	Open	
13	○	○	○	Ground (red)	
14	○	○	○	Ground (blanking)	
15	○	-	-	Red input	0.7 +/- 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1-3V) Low state (0-0.4V) Input impedance : 75 ohms
17	○	○	○	Ground (video output)	
18	○	○	○	Ground (video input)	
19	○	○	○	Video output	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
20	○	-	-	Video input	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected ● Not Connected (open) * at 20Hz - 20kHz

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V+/- 3dB 75 ohm, positive Sync 0.3V -3/+10dB
4	C (S signal) input	0.3V+/- 3dB 75 ohm, positive Sync

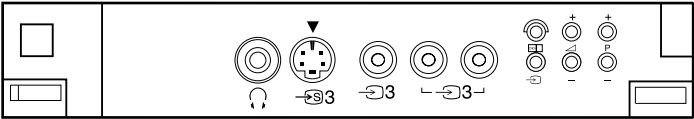


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CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR THE CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP

WARNING !!

AN ISOLATING TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD DUE TO LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.


ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

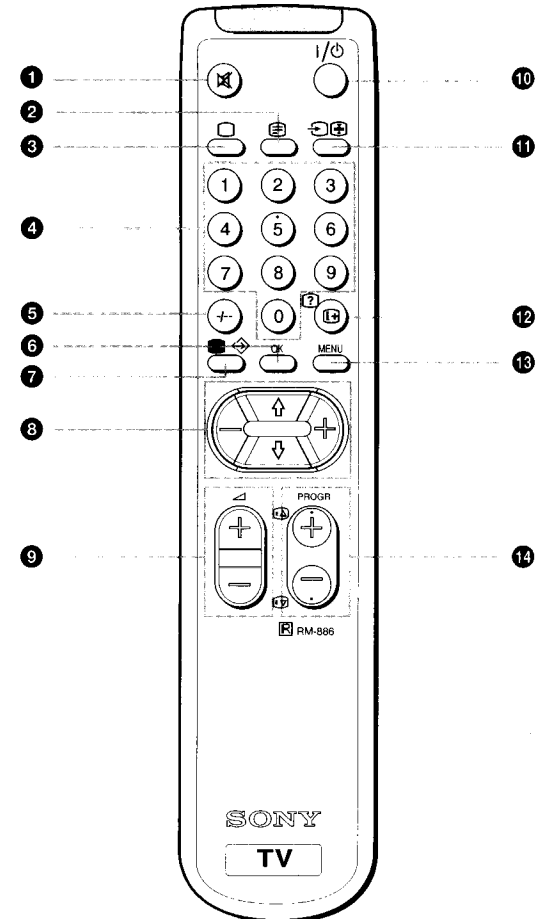
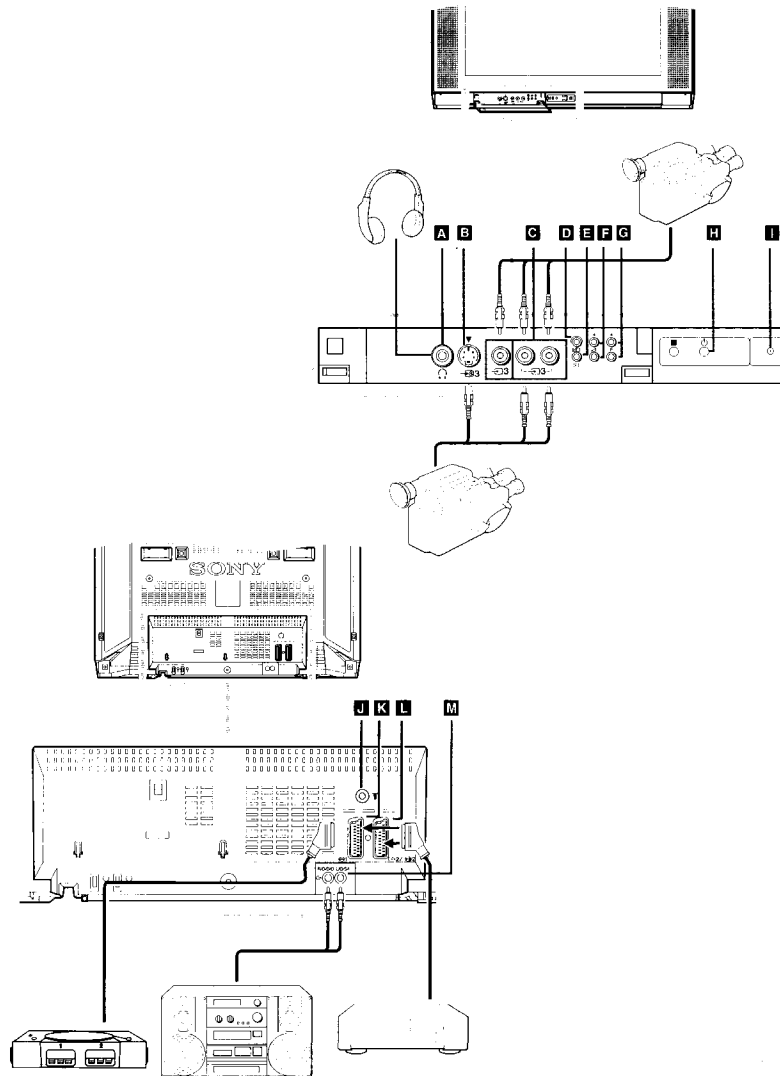
AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ !!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE  SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÈCURITÉ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPSANTS SONY DONT LE NUMÈRE DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÈMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL
















The operating instructions mentioned here are partial abstracts from the Operating Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

















Overview

This section briefly describes the controls and the buttons on the TV set and on the Remote Commander. Please open the flap at the front of the instruction manual for illustrations of the TV set and the Remote Commander. Letters in boxes refer to the buttons on the TV set, numbers in circles to the buttons on the Remote Commander. For more information, refer to the page numbers given next to each description.

TV buttons and Terminals

Reference and Symbol	Name	Refer to Page
Front of the set		
A 	Headphones jack	29
B  3	S video input jack	29
C  3,  3	Audio/video input jacks	29
D 	Automatic Preset button	11
E 	Input mode button	13
F  +/-	Volume control	12
G  P +/-	Programme button	12
H 	Standby mode indicator	12
I 	Main power switch	12
Rear of the set		
J 	Aerial socket	10
K  1	21 pin Euro connector	29
L  2 /  2	21 pin Euro connector	29
M 	Audio outputs - phono jacks	29



Remote Commander Operation

Reference and Symbol	Name	Refer to Page
1 	Muting on/off button	12
2 	Teletext button	13
3 	TV power on/TV mode button	12, 13
4 1, 2, ..., 9, 0	Number buttons	12
5 - / - -	Double digit entering button	12
6 OK	OK (Confirmation) button	14
7  	Picture mode button Teletext: Favourite pages button	12 28
8 	Menu control	14
9  +/-	Volume control button	12
10 	TV standby ON-OFF button/TV power on	12
11  	Input mode button Teletext: Freezing the subpage	13 27
12  	On-screen display button Teletext: reveal button	12 27
13 MENU	Menu on/off button	14
14  	Programme buttons Teletext: Page up/page down buttons	12 13

Step 1

Connecting the Aerial

(If you connect a VCR, skip to step 2)

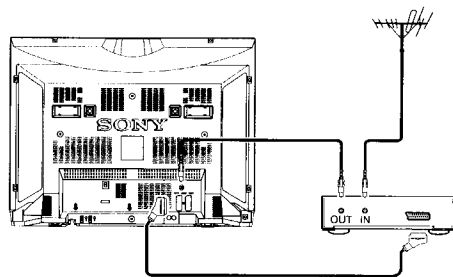
Insert the aerial plug tightly into the aerial socket  . Use a good-quality aerial cable (not supplied), corresponding to the relevant regulations.

Step 2

Connecting a VCR

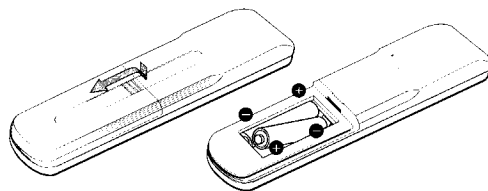
We recommend that you tune in the VCR signal to programme number "0". For details, see "Presetting Channels Manually" on page 16.

See "Connecting Optional Equipment" on page 29 for more information.



Step 3

Inserting the Batteries Into the Remote Commander







Respect your environment! Dispose of used batteries in an environmentally friendly way.

Step 4

Presetting Channels Automatically

With this function, the TV can automatically search and store up to 100 different channel numbers. If you prefer manual presetting, refer to "Presetting Channels Manually" on page 16.

- 1 Plug into mains.
Press the power switch   on the TV set.
- 2 Press and hold the button   on the TV set until the automatic menu is displayed and the search starts.

After all available channels are stored, the normal TV picture is shown.

Note: Channels are automatically stored as follows:

- Programme 1 BBC1
- Programme 2 BBC2
- Programme 3 ITV
- Programme 4 CH4 or S4C
- Programme 5 CH5 (if available in your area)
- Programme 6 -
- Programme 7 -

TV Operation

This section explains functions used whilst watching TV. Most operations are carried out using the remote commander (numbers in circles). All basic functions are also available on the TV set (letters in boxes). Open the flap at the front of the Instruction Manual to see the illustrations of the Remote Commander and the TV set.

To	Press
Switch on	⓪ I on TV
Switch off temporarily	I/⓪ 10 TV is now in standby mode and ⓪ H indicator on TV lights up.
Switch on from standby mode	⓪ 3 , I/⓪ 10 , PROGR +/- 14 G or any number button 4 .
Switch off completely	⓪ I on TV To save energy, switch off your TV completely when TV is not in use.
Select programmes	PROGR +/- 14 G or number buttons 4 For double digit number, press -/- 5 then the number e.g. For 23, press -/- 5 then 2 and 3.
Display on screen indications	i 12 . Press again to make the indications disappear.
Adjust the volume	△ + or - 9 F
Mute the sound	ⓧ 1 . Press again to restore the sound.

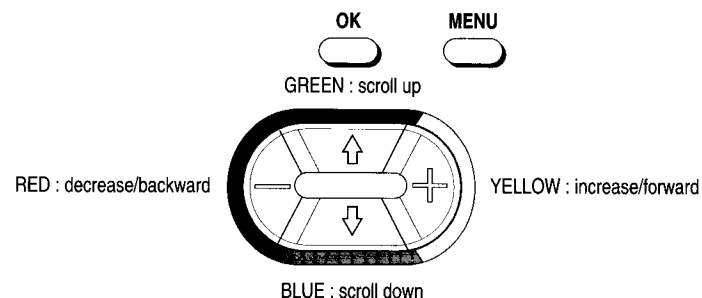
TV Operation (continued)

To	Press
View video input picture (see page 30 for detailed information)	↺ 11 E repeatedly until the desired video input appears. Press ⓪ 3 to restore the TV picture.
View teletext (see page 27 for detailed information)	
Switch on teletext	≡ 2
Select a page	three number buttons 4 or ↵ 14 (for next page) or ↶ 14 (for previous page).
Use fastext	Blue, Green, Red or Yellow 8 .
Switch off teletext	⓪ 3 or press ≡ 2 twice.

Adjusting and Setting the TV Using the Menu

You can adjust and set various functions on the TV using the following remote commander buttons:

- 1 Press MENU **13** to switch menu on/off.
- 2 Use the menu control buttons **8** and OK button **6** (confirm) as follows:

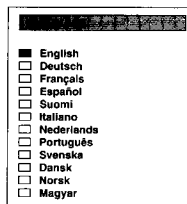


Choosing the Menu Language

This function enables you to change the language of the menu screens.

- 1 Press power switch **1** on the TV. If the standby indicator **1** on the TV is lit, press **3** or a number button **4** on the Remote Commander.

- 2 Press the MENU button **13** on the remote commander.



- 3 Press blue or green **8** to select the language you want then press yellow **8**.

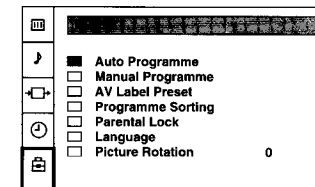
- 4 Press the MENU button **13** to restore the normal TV picture.

Note: If you wish to change your chosen language, press the MENU button to display the main menu, then select 'Language'.

Presetting Channels Automatically

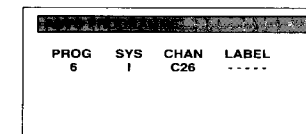
You may have already preset the channels automatically by using the method shown on page 11. You can also preset channels automatically by using the remote commander as follows:

- 1 Press the MENU button **13**.
- 2 Press blue or green **8** to select the symbol **14** on the menu screen then press yellow **8**.



- 3 Press blue or green **8** to select 'Auto Programme'.

- 4 Press and hold yellow **8** until the automatic menu is displayed and the search starts.



After all available channels have been preset, the normal TV picture is shown.


Note: Channels are automatically stored as follows:

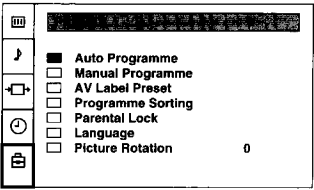
- Programme 1 BBC1
- Programme 2 BBC2
- Programme 3 ITV
- Programme 4 CH4 or S4C
- Programme 5 CH5 (if available in your area)

Presetting Channels Manually

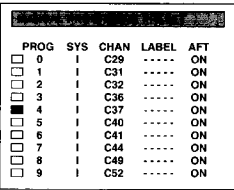
This function enables you to preset channels one by one to different programme numbers. This is also convenient for allocating programme numbers to various video input sources.

1 Press the MENU button **10**.

2 Press blue or green **8** to select the symbol  on the menu screen then press yellow **9**.



3 Press blue or green **8** to select 'Manual Programme' then press yellow **9**.



PROG	SYS	CHAN	LABEL	AFT
<input type="checkbox"/> 0	I	C29	----	ON
<input type="checkbox"/> 1	I	C31	----	ON
<input type="checkbox"/> 2	I	C32	----	ON
<input type="checkbox"/> 3	I	C36	----	ON
<input checked="" type="checkbox"/> 4	I	C37	----	ON
<input type="checkbox"/> 5	I	C40	----	ON
<input type="checkbox"/> 6	I	C41	----	ON
<input type="checkbox"/> 7	I	C44	----	ON
<input type="checkbox"/> 8	I	C48	----	ON
<input type="checkbox"/> 9	I	C52	----	ON

4 Press blue or green **8** to select on which programme number you want to preset a channel then press yellow **9**.

5 Press blue or green **8** to select the TV broadcast system 'I' or a video input source (AV1,AV2 ...) then press yellow **9**.

6 Press yellow **9**.

7 Select the first number digit of 'CHAN' (channel) then the second number digit of 'CHAN' with the number buttons **4** on the remote commander
or
Press blue or green **8** to search for the next available channel.

8 If you want to store the channel, go to step 9. If not, select a new channel using the number buttons **4** on the remote commander or press blue or green **8** to resume the search.

9 Press OK **6**.

10 Repeat steps 4 to 9 to preset other channels.

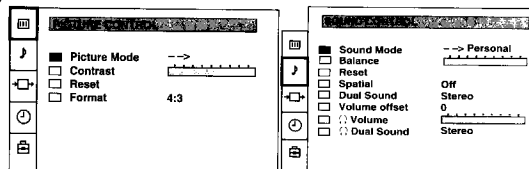
11 Press the MENU button **10** to restore the normal TV picture.

Adjusting the Picture and Sound

Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste.

1 Press the MENU button **13**.

2 Press blue or green **8** to select **Picture** for picture control or **Sound** for sound control then press yellow **9**.



3 Press blue or green **8** to select the desired item then press yellow **9**.

4 Press red or yellow **8** to alter the item then press OK **6**.
For the effect of each control, see the following tables.

5 Repeat steps 3 and 4 to adjust the other items.

6 Press the MENU button **13** to restore the normal TV picture.

PICTURE CONTROL Effect

Picture Mode	<ul style="list-style-type: none"> Personal (for individual settings) —> Movie (for films) —> Live (for programmes broadcast live or for use in bright room conditions) In 'Personal' mode, you can preset Brightness, Colour, Sharpness and Hue (NTSC signals only) as follows: <ol style="list-style-type: none"> Press blue or green to select the desired item then press yellow. Press red or yellow to adjust then press OK. Press red to return to the PICTURE CONTROL menu.
Contrast	<ul style="list-style-type: none"> Darker — — Brighter (affects the chosen picture mode setting)
Reset	<ul style="list-style-type: none"> Resets the selected picture mode to the factory preset levels.
Format	<ul style="list-style-type: none"> Wide screen effect (16:9)

Adjusting the Picture and Sound (continued)

SOUND CONTROL Effect

Sound Mode	<ul style="list-style-type: none"> Personal —> Rock —> Jazz —> Pop In 'Personal' mode, you can preset Treble and Bass as follows: <ol style="list-style-type: none"> Press blue or green to select the item then press yellow. Press red or yellow to adjust then press OK. Press red to return to the 'SOUND CONTROL' menu.
Balance	<ul style="list-style-type: none"> Left — — Right
Reset	<ul style="list-style-type: none"> Resets sound to the factory preset levels.
Spatial	<ul style="list-style-type: none"> Acoustic sound effect.
Dual Sound	<ul style="list-style-type: none"> A: Left channel —> B: Right channel —> stereo —> mono
Volume Offset	<ul style="list-style-type: none"> Presets the volume level for individual programmes. -12 — 0 — +12
Volume	<ul style="list-style-type: none"> Adjusts the headphone volume.
Dual Sound	<ul style="list-style-type: none"> Selects the headphone channels. A: Left channel —> B: Right channel —> stereo —> mono

Changing Modes Quickly


You can quickly change the Picture Mode without entering the 'PICTURE CONTROL' menu.

- Press **7**.
- Press blue or green to select the desired mode
or
Press **7** to select the desired mode.
- Press the MENU button **13** to restore the normal TV picture.

Manual Fine-Tuning

Normally, the automatic fine-tuning (AFT) function is operating.


If the picture is distorted however, you can manually fine-tune the TV to obtain a better picture reception.

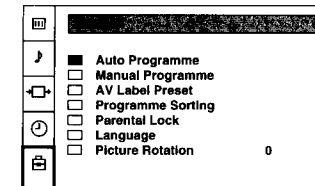
- 1 Press the MENU button **13**.
- 2 Press blue or green **8** to select the symbol  on the menu screen then press yellow **8**.
- 3 Press blue or green **8** to select 'Manual Programme' then press yellow **8**.
- 4 Press blue or green **8** to select the programme number which corresponds to the channel you want to manually fine-tune.
- 5 Press yellow **8** repeatedly until the AFT position changes colour..
- 6 Press blue or green **8** to fine-tune the channel frequency (-15 to +15).
- 7 Press OK **6**.
- 8 Repeat steps 4 to 7 to fine-tune other channels.
- 9 Press the MENU button **13** to restore the normal TV picture.

PROG	SYS	CHAN	LABEL	AFT
<input type="checkbox"/> 0	I	C29	----	ON
<input type="checkbox"/> 1	I	C31	----	ON
<input type="checkbox"/> 2	I	C32	----	ON
<input type="checkbox"/> 3	I	C36	----	ON
<input checked="" type="checkbox"/> 4	I	C37	----	ON
<input type="checkbox"/> 5	I	C40	----	ON
<input type="checkbox"/> 6	I	C41	----	ON
<input type="checkbox"/> 7	I	C44	----	ON
<input type="checkbox"/> 8	I	C48	----	ON
<input type="checkbox"/> 9	I	C52	----	ON

Sorting Programme Positions

This function enables you to exchange the programme positions.

- 1 Press the MENU button **13**.
- 2 Press blue or green **8** to select the symbol  on the menu screen then press yellow **8**.
- 3 Press blue or green **8** to select 'Programme Sorting' then press yellow **8**.
- 4 Press blue or green **8** to select the channel you want to exchange then press yellow **8**.
- 5 Press blue or green **8** to select the programme position of the channel you want exchanged then press yellow **8**.
- 6 Repeat steps 4 to 5 if you wish to exchange other programme positions.
- 7 Press the MENU button **13** to restore the normal TV picture.

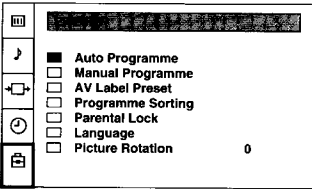


PROG	SYS	CHAN	LABEL
<input checked="" type="checkbox"/> 0	I	C28	BBC-W
<input type="checkbox"/> 1	I	C29	VHS-2
<input type="checkbox"/> 2	I	C36	CNN-
<input type="checkbox"/> 3	I	C38	----
<input type="checkbox"/> 4	I	C40	MV-CH
<input type="checkbox"/> 5	I	C42	VHS-1
<input type="checkbox"/> 6	I	C55	----
<input type="checkbox"/> 7	I	C56	8MM
<input type="checkbox"/> 8	I	C57	----
<input type="checkbox"/> 9	I	C58	----

Using Parental Lock

This function enables you to prevent undesirable broadcasts from appearing on the screen. We suggest you use this function to prevent children from watching programmes which you consider unsuitable.

- 1 Press the MENU button 13.
- 2 Press blue or green 8 to select the symbol 14 on the menu screen then press yellow 8.
- 3 Press blue or green 8 to select 'Parental Lock' then press yellow 8.



- 4 Press blue or green 8 to select the channel you want to block then press yellow 8. The symbol 14 appears before the programme number to indicate that this channel is now blocked.

PROG	SYS	CHAN	LABEL
0	1	C28	BBC-W
1	1	C29	VHS-2
2	1	C35	CNN--
3	1	C38	----
4	1	C40	MV-CH
5	1	C42	VHS-1
6	1	C55	----
7	1	C56	8MM
8	1	C57	----
9	1	C58	----

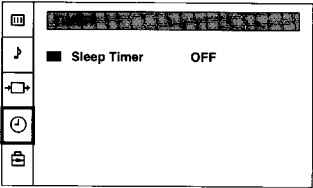
- 5 Repeat step 4 if you wish to block other channels.
- 6 Press the MENU button 13 to restore the normal TV picture.

Note: To unblock, press yellow 8 after selecting the channel to unblock in the 'PARENTAL LOCK' menu.

Using the Sleep Timer

This function enables you to select a time period after which the TV automatically switches into standby mode.

- 1 Press the MENU button 13.
- 2 Press blue or green 8 to select the symbol 14 on the menu screen then press yellow 8.



- 3 Press yellow 8.
- 4 Press red or yellow 8 to set time delay and press OK 6.

OFF 0:30 1:00 1:30 3:30 4:00


One minute before the TV switches into standby mode, a message is displayed on the screen.

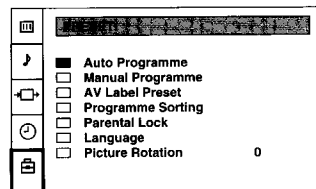
- 5 Press the MENU button 13 to restore the normal TV picture.

Adjusting the Picture Rotation

If, due to the earth magnetism, the picture slants, you can use the function 'Picture Rotation' to readjust the picture.

1 Press the MENU button **19**.

2 Press blue or green **8** to select the symbol  on the menu screen then press yellow **8**.



3 Press blue or green **8** to select 'Picture Rotation' then press yellow **8**.


4 Press red or yellow **8** to adjust the picture rotation then press OK **6**. The adjusting range is -5 to +5.

5 Press the MENU button **19** to restore the normal TV picture.

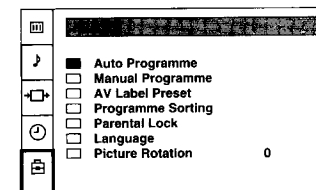
Skipping Programme Positions

This function enables you to skip unused programme positions when selecting them with the PROGR+/- buttons. However, you can still watch the channel of the skipped programme position by using the number buttons.

1 Press the MENU button **19**.

2 Press blue or green **8** to select the symbol  on the menu screen then press yellow **8**.

3 Press blue or green **8** to select 'Manual Programme' then press yellow **8**.



4 Press blue or green **8** to select the programme position you want to skip then press yellow **8**.

5 Press blue or green **8** until '---' appears in the 'SYS' position.

PROG	SYS	CHAN	LABEL	AFT
<input type="checkbox"/> 0		C29	----	ON
<input type="checkbox"/> 1		C31	----	ON
<input type="checkbox"/> 2		C32	----	ON
<input type="checkbox"/> 3		C36	----	ON
<input type="checkbox"/> 4		C37	----	ON
<input type="checkbox"/> 5		C40	----	ON
<input type="checkbox"/> 6		C41	----	ON
<input type="checkbox"/> 7		C44	----	ON
<input type="checkbox"/> 8		C49	----	ON
<input type="checkbox"/> 9		C52	----	ON

6 Press OK **6**.


7 Repeat steps 4 to 6 to skip other programme positions.

8 Press the MENU button **19** to restore the normal TV picture.

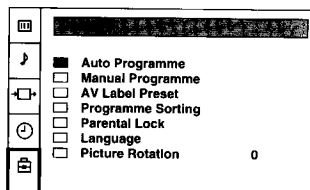
Captioning a Station Name

Names for channels are usually automatically taken from teletext if available. You can however name a channel or an input video source using up to five characters (letters or numbers).

1 Press the MENU button **19**.

2 Press blue or green **8** to select the symbol  on the menu screen then press yellow **8**.

3 Press blue or green **8** to select 'Manual Programme' then press yellow **8**.



4 Press blue or green **8** to select the channel you wish to caption then press yellow **8** repeatedly until the first element of the 'LABEL' position is highlighted.

5 Press **8** blue or green to select a letter or number and press yellow **8** (select '-' for a blank). Select the other four characters in the same way.

PROG	SYS	CHAN	LABEL	AFT
<input type="checkbox"/> 0	I	C29	----	ON
<input type="checkbox"/> 1	I	C31	----	ON
<input type="checkbox"/> 2	I	C32	----	ON
<input type="checkbox"/> 3	I	C36	----	ON
<input checked="" type="checkbox"/> 4	I	C37	A----	ON
<input type="checkbox"/> 5	I	C40	----	ON
<input type="checkbox"/> 6	I	C41	----	ON
<input type="checkbox"/> 7	I	C44	----	ON
<input type="checkbox"/> 8	I	C49	----	ON
<input type="checkbox"/> 9	I	C52	----	ON

6 After selecting all the characters, press OK **6**.

7 Repeat steps 4 to 6 to caption names for other channels.

8 Press the MENU button **19** to restore the normal TV screen.

Teletext

Most TV channels broadcast information via teletext. The index page of the broadcaster (usually page 100) gives you information on how to use the service. Make sure you use a TV channel with a strong signal, otherwise teletext errors may occur.

Switching Teletext On and Off

1 Select the channel which carries the teletext service you wish to view.

2 Press **2** to display teletext.
If no teletext signal is broadcast, the indication No Text is displayed on a black screen.

3 Input three digits for the page number using the number buttons **4**.
The page counter searches for the page and after some seconds the page is displayed.

4 Press **3** or press **2** twice to return to the normal TV picture.

Using Other Teletext Functions

To	Press
Access the next or preceding teletext page	19 4 for the next page or 19 4 for the preceding page
Mix the mode	2 when in teletext mode. Now the teletext page is superimposed on the TV programme. Press again to return to the normal TV picture.
Freeze a teletext subpage	19 11 . Press once again to cancel.
Reveal hidden information (eg: answers to a quiz)	19 12 . Press once again to cancel.

Favourite page system

You can store up to four of your favourite teletext pages per Teletext service. In this way you have quick access to the pages you frequently use.

Storing pages

- 1 Use the number buttons **4** to select the page you would like to store.
- 2 Press **↔ 7** twice.
The colour prompts at the bottom of the screen flash.
- 3 Press red, green, blue or yellow **8** to store the selected page.
The page is now stored on this colour.

Repeat steps 1 to 3 for the other 3 pages.

Displaying the Favourite Pages

- 1 Press **↔ 7**.
- 2 Press red, green, blue or yellow **8** to select the desired page.

Make sure you press **↔ 7**, otherwise the normal Fastext facility operates.

Using Fastext

(only available, if the TV station broadcasts Fastext signals)

With Fastext you can access pages with one key stroke . When Fastext is broadcast, a colour-coded menu appears at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue colours on the Remote Commander. Press the colour button **8** that corresponds to the colour-coded menu. The selected page is displayed after some seconds.

Connecting Optional Equipment

There is a wide range of optional equipment you can connect to your TV. Refer to the illustrations on the front flap page of this manual.

Symbol	Acceptable input signals	Available output signals
1 K	Normal audio/video and RGB	Audio/video from TV tuner
2 / 2 L	Normal audio/video and S video	Audio/video from selected source
3, 3 B 3 C	Normal audio/video and S video	No output
M	Normal audio/video and RGB	Audio/video from TV tuner

Connecting Headphones

Plug in the headphones to the socket **A** on the front of the TV.

About S video input

Video signals may be separated into Y (luminance) and C (chrominance) signals. Separating the two signals prevents interference and thus improves the picture quality.

Notes on connections:

- If the picture or sound is distorted, move the VCR away from the TV.
- When connecting a monaural VCR, connect only the white jack to both the TV and VCR.
- Select 'TV' for output in the 'VIDEO CONNECTION' menu if you connect a decoder to 2 / 2 **L** (see page 30).

Selecting Input and Output Signals

This section explains how to select the output signal from 2 / 2 **L** and how to select and view the input. You can use direct access buttons **1** **E** to select the input or the menu system to select input and output.

Selecting Input Signals With Direct Access Buttons

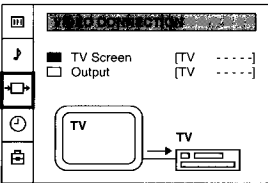
Press **1** **E** repeatedly.
Press **3** to restore the normal TV picture.

Symbol on the screen	Input Signal
1	Audio/video through Euro AV connector K
2	RGB through Euro AV connector K
2	Audio/video through Euro AV connector L
2	S video through Euro AV connector L
3	Audio/video through the phono jacks C
3	S video through the 4 pin DIN B

Selecting With the Video Connection Menu

1 Press the MENU button **10**.

2 Press blue or green **8** to select for "VIDEO CONNECTION" then press yellow **9**.



3 Press blue or green to select input (for the TV screen) or output (for 2 / 2 **L**) then press yellow **9**.

4 Press red or yellow repeatedly to select the desired input or output source then press OK **6**.

5 Press the MENU button **10** to restore the normal TV picture.

Note: If you select 'AUTO' for output, the output source automatically becomes the same as the desired input source.

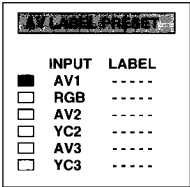
Using AV Label Preset

This function enables you to label the input sources using up to five characters (letters or numbers).

1 Press the MENU button **10**.

2 Press blue or green **8** to select the symbol on the screen then press yellow **9**.

3 Press blue or green **8** to select 'AV LABEL PRESET' then press yellow **9**.



4 Press blue or green **8** to select the desired input source then press yellow **9**.

5 Press blue or green **8** to select a letter or number then press yellow **9** (select '-' for a blank).
Select the other four characters in the same way.

6 After selecting all the characters, press OK **6**.

7 Repeat steps 4 to 6 to label other input sources.

8 Press the MENU button **10** to restore the normal TV screen.

Troubleshooting

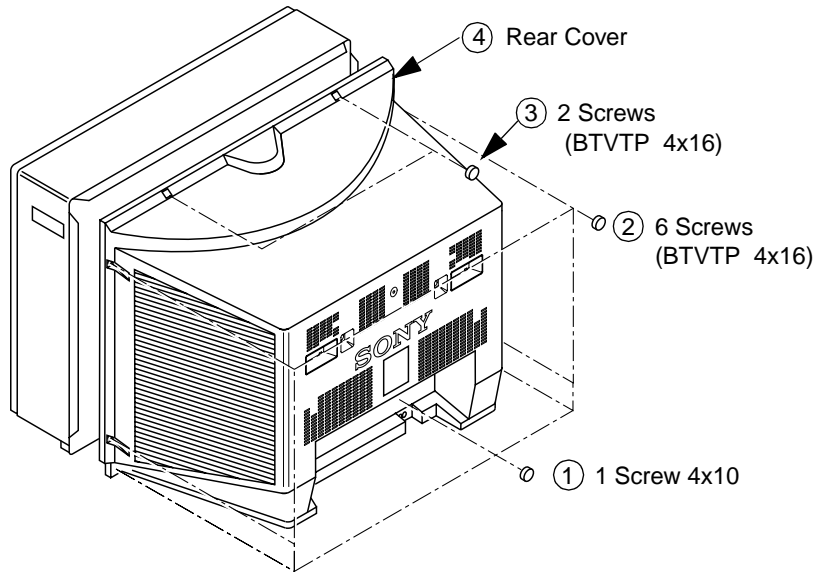
Here are some simple solutions to the problems which affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	<ul style="list-style-type: none"> • Plug the TV in. • Press ① I on the TV. (If ① indicator H is on, press ① 3 or a programme number 4 on the Remote Commander.) • Check the aerial connection. • Check if the selected video source is on. • Turn the TV off for 3 or 4 seconds then turn it on again using ① I.
Poor or no picture (screen is dark), but good sound	<ul style="list-style-type: none"> • Press MENU 13 to enter the 'PICTURE CONTROL' menu and adjust 'Contrast', 'Brightness' and 'Colour'.
Poor picture quality when watching an RGB video source.	<ul style="list-style-type: none"> • Press 11 E repeatedly to select 11.
Good picture but no sound	<ul style="list-style-type: none"> • Press 11 + 9 F. • If 11 is displayed on the screen, press 11.
No colour for colour programmes	<ul style="list-style-type: none"> • Press MENU 13 to enter the 'PICTURE CONTROL' menu, select 'Reset' then press OK 6.
Remote Commander does not function.	<ul style="list-style-type: none"> • Replace the batteries.

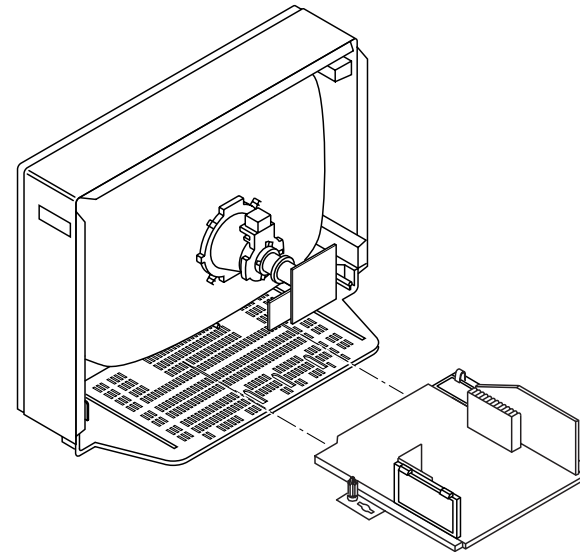
If you continue to have problems, have your TV serviced by qualified personnel.
Never open the casing yourself.

SECTION 2 DISASSEMBLY

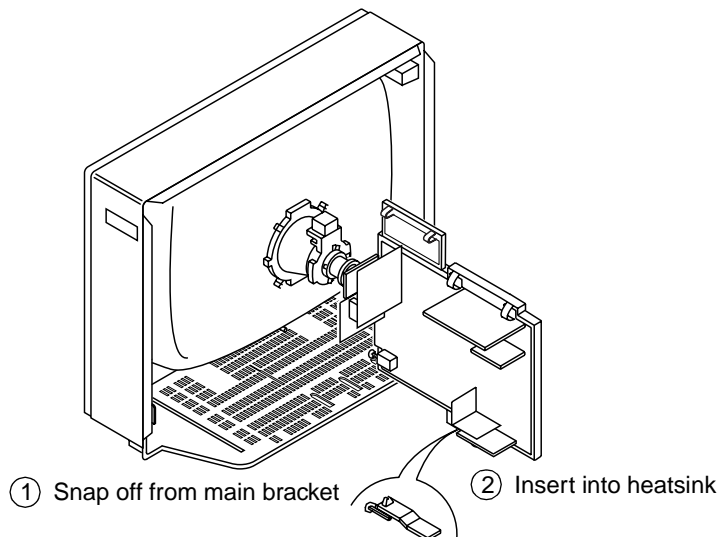
2-1. REAR COVER REMOVAL



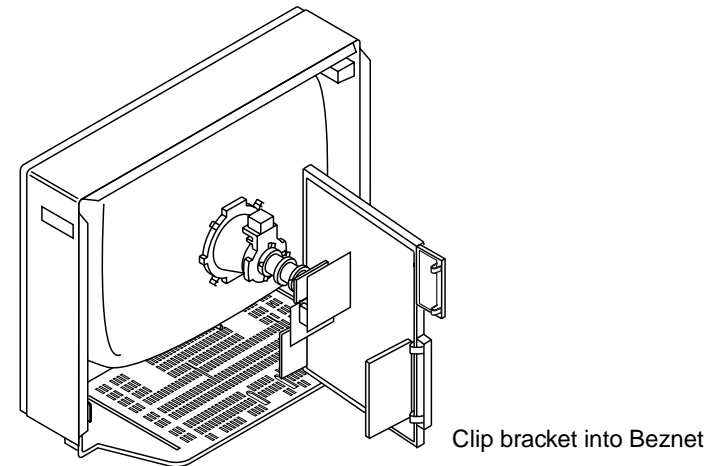
2-2. CHASSIS ASSY REMOVAL



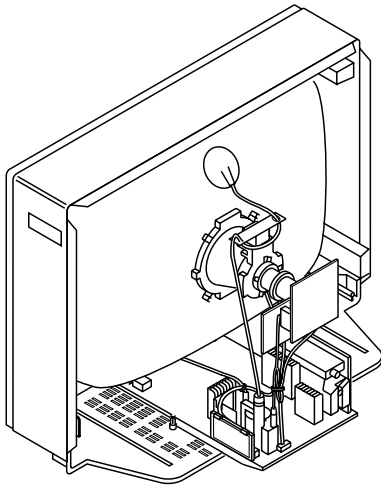
2-3-1. SERVICE POSITION (1)



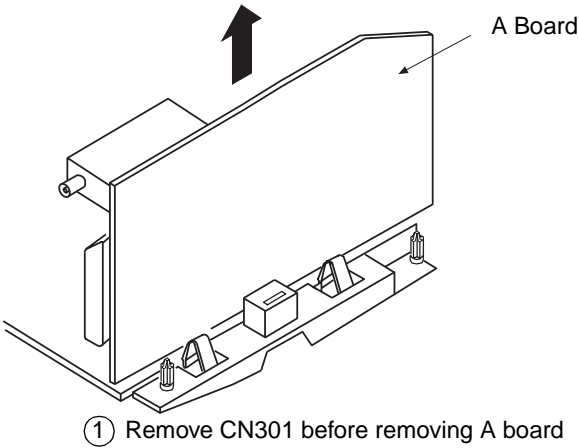
2-3-2. SERVICE POSITION (2)



2-4. WIRE DRESSING



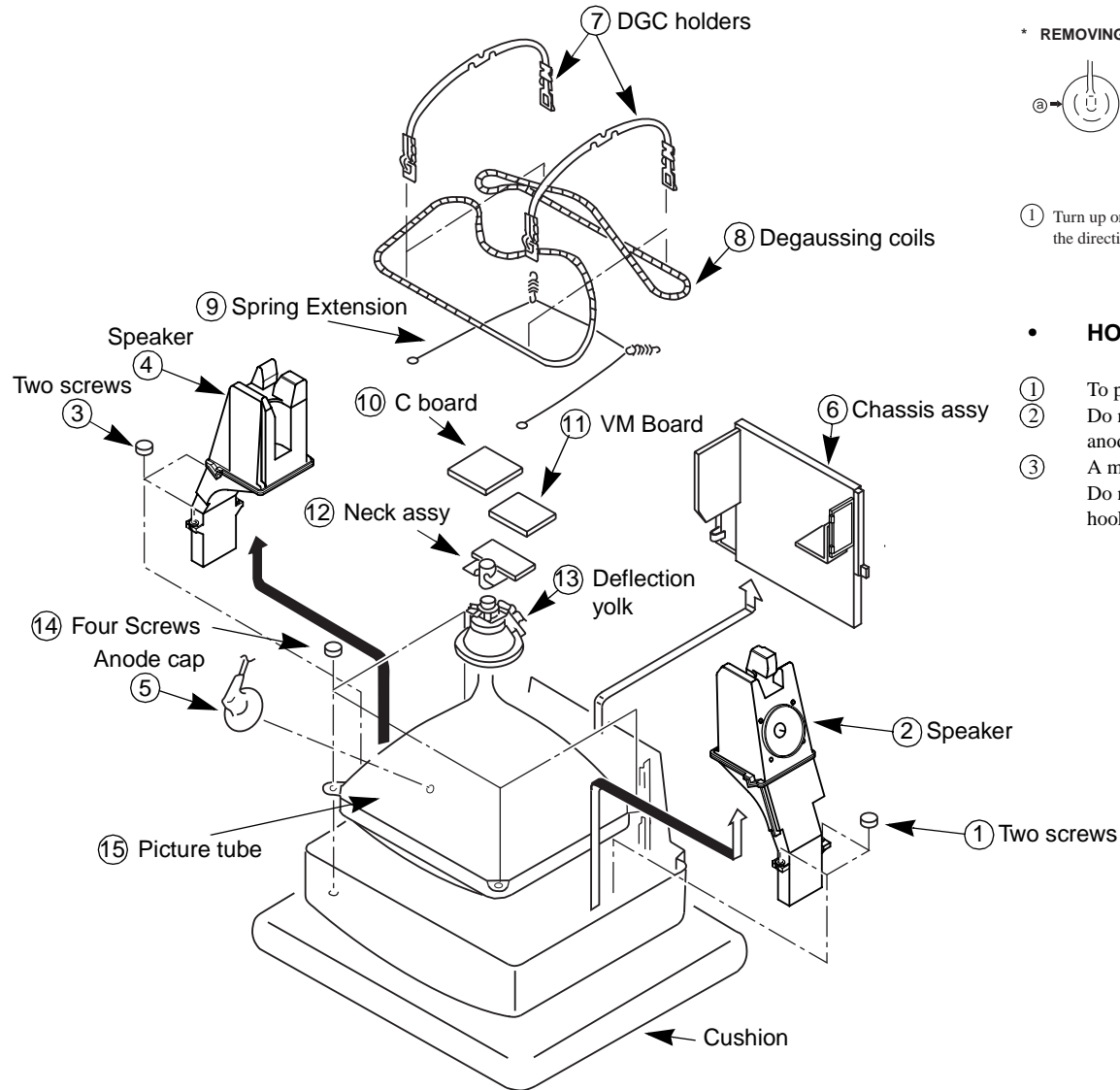
2-5. A BOARD REMOVAL



2-6. A EXTENSION BOARD



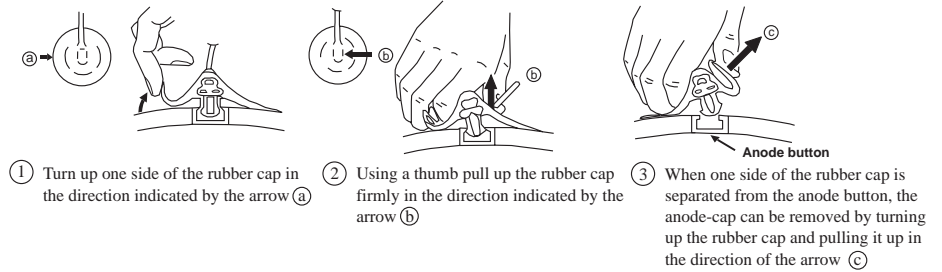
2-7. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

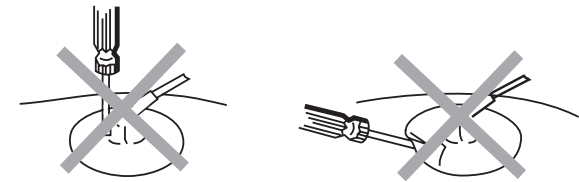
Note : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

* REMOVING PROCEDURES.



• HOW TO HANDLE THE ANODE-CAP

- ① To prevent damaging the surface of the anode-cap do not use sharp materials.
- ② Do not apply too great a pressure on the rubber, as this may cause damage to the anode connector.
- ③ A metal fitting called a shatter hook terminal is fitted inside the rubber cap. Do not turn the rubber foot over excessively this may cause damage if the shatter hook sticks out.

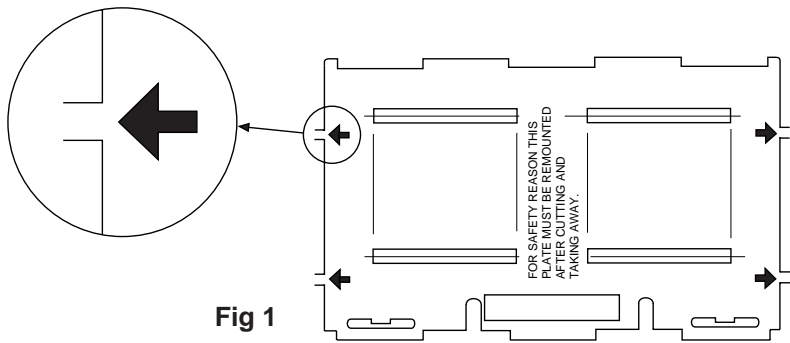


REMOVAL AND REPLACEMENT OF THE MAIN-BRACKET
BOTTOM PLATES.

(1) REMOVING THE PLATES

In the event of servicing being required to the solder side of the D Board printed circuit, the bottom plates fitted to the main chassis bracket require to be removed. This is performed by cutting the gates with a sharp wire cutter at the locations shown and indicated by arrows.

Note : There are 5 plates fitted to the main bracket and secured by 4 or 6 gates. Only remove the necessary plate to gain access to the circuit board.

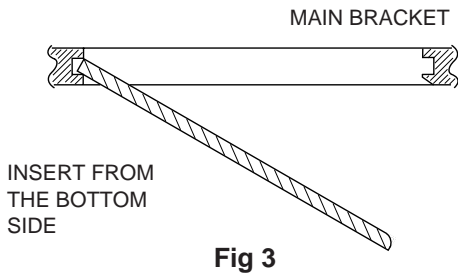
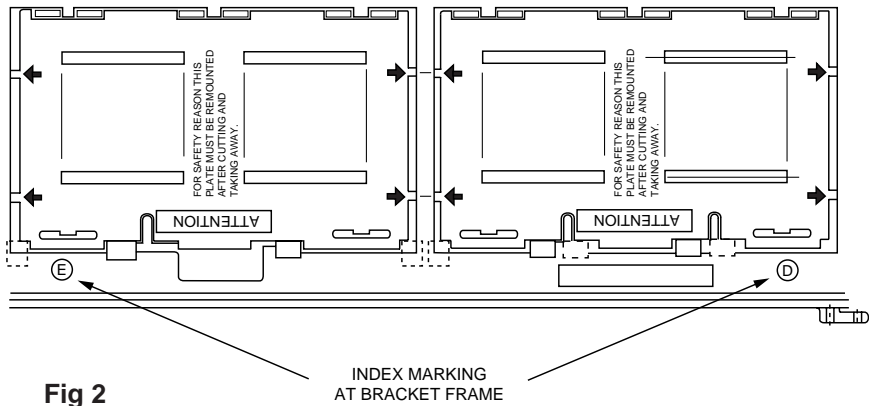


For safety reasons, on no account should the plates be removed and not refitted after servicing.

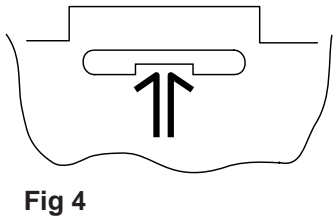
(2) REFITTING THE PLATES

Because the plates differ in size it is important that the correct plates are refitted in their original location. The plates are identified by markings A-B-C-D-E on their top side.

1. Identify the plate by locating its marking.
2. Turn the plate over noting where the marking is located.
3. Locate the corresponding marking indicated on the main chassis bracket. See Fig 2.
4. Refit the plate as indicated in Fig 3 with the markings located next to each other.



In the event of the plates requiring to be removed at a later stage, this can be achieved by inserting a screwdriver in the snap-recess indicated as in Fig 4 and lifting out.



SECTION 3 SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to the following settings :

Contrast 80% [or remote control normal]
 Brightness 50%

Carry out the following adjustments in this order :

- 3-1. Beam Landing
- 3-2. Convergence
- 3-3. White balance
- 3-4. Focus

Note : Test equipment required

1. Color bar/pattern generator.
2. Degausser.
3. Oscilloscope.
4. Digital multimeter.
5. DC Power supply.

Preparation:

1. In order to reduce the influence of geomagnetism on the set's picture tube, face it in an easterly or westerly direction.
2. Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input an all white signal from the pattern generator. Set the Contrast and Brightness to normal.
2. Set the pattern generator raster signal to Red.
3. Move the deflection yolk forward and adjust with the purity control so that the Red is at the centre and the Blue and Green take up equally sized areas on each side of the screen. [See Fig.3-1 - 3-3].
4. Move the deflection yolk forward and adjust so that the entire screen becomes Red. [See Fig.3-1]
5. Switch the raster signal to Blue, then to Green and verify the condition.
6. When the position of the deflection yolk has been determined, fasten the deflection yolk with the screws.
7. If the beam does not land correctly in all the corners, use a magnet to correct it. [See Fig.3-4]

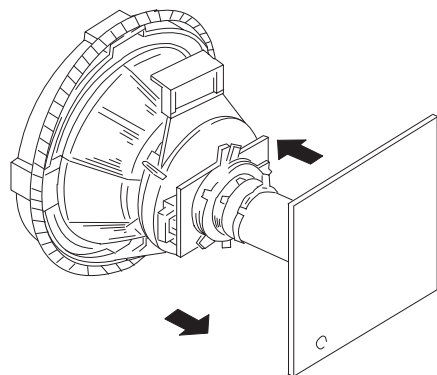


Fig. 3-1

Fig. 3-2

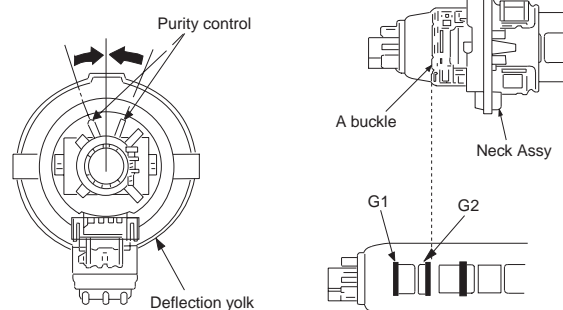


Fig. 3-3

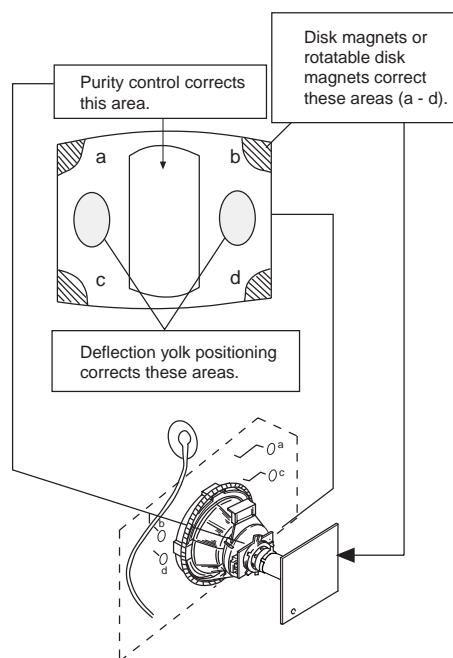
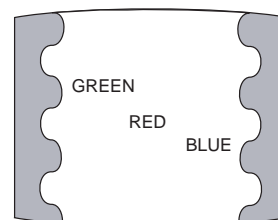


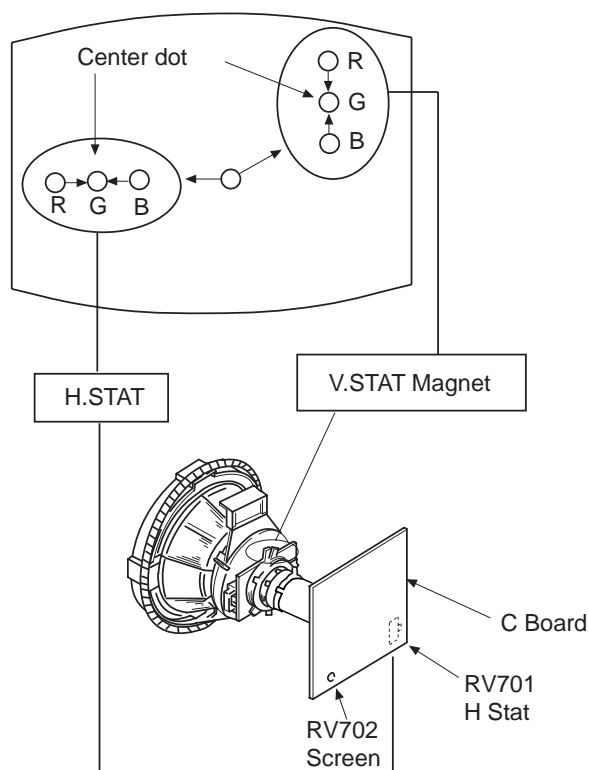
Fig. 3-4

3-2. CONVERGENCE

Preparation:

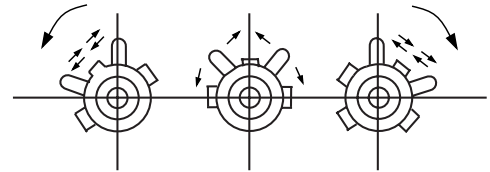
- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Minimize the Brightness setting.
- Input a dot pattern from the pattern generator.

(1) Horizontal and vertical static convergence

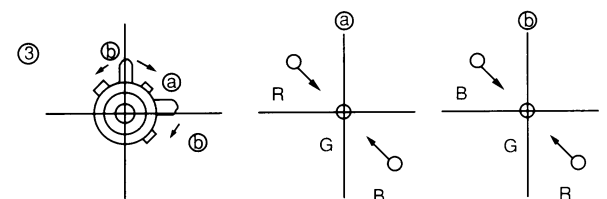
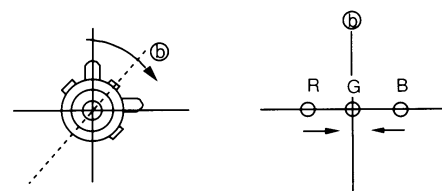
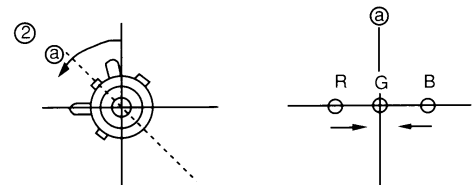
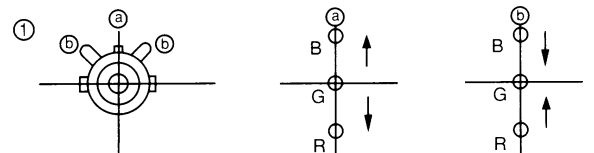


1. [Moving horizontally], adjust the H.STAT control so that the Red, Green and Blue points are on top of each other at the centre of the screen.
2. [Moving vertically], adjust the V.STAT magnet so that the Red, Green and Blue points are on top of each other at the centre of the screen.
3. If the H.STAT variable resistor is unable to bring the Red, Green and Blue points together at the centre of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner indicated below. [In this case, the H.STAT variable resistor and the V.STAT magnet influence each other].

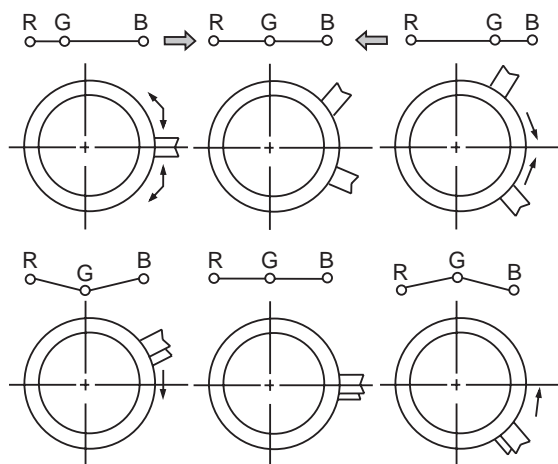
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



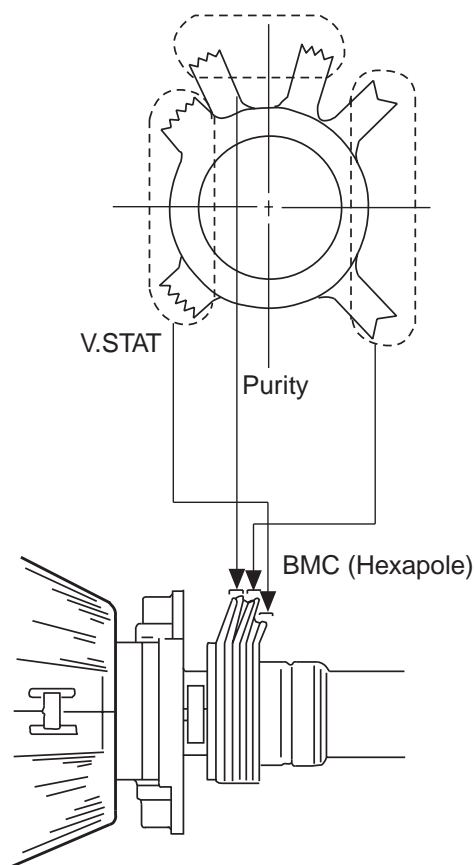
4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the Red, Green and Blue points move as indicated below.



- Operation of the BMC (Hexapole) magnet.



- The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment whilst tracking.
Use the H.STAT VR to adjust the Red, Green and Blue dots so that they coincide at the centre of the screen (by moving the dots in the horizontal direction).



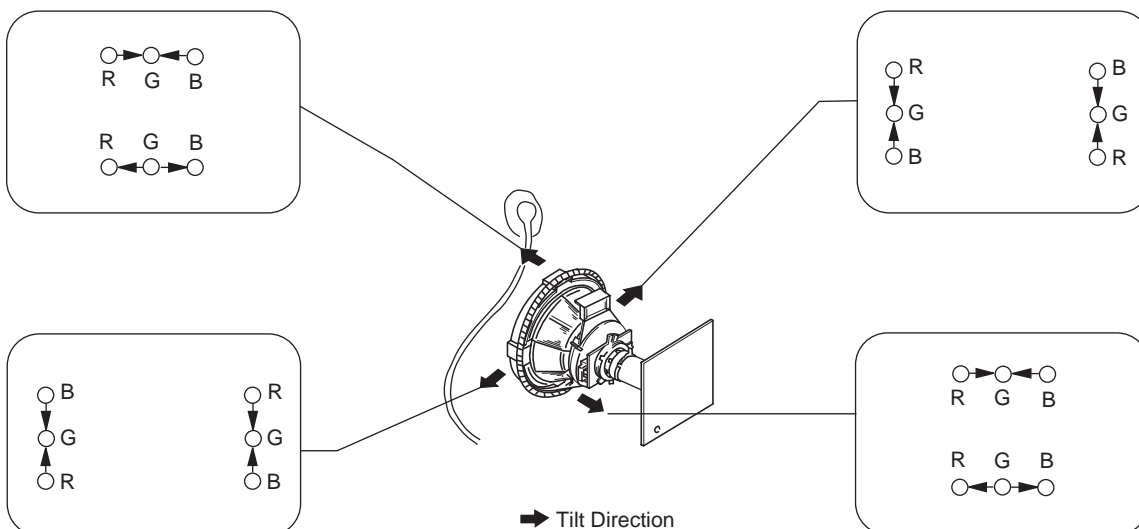
(2) Dynamic convergence adjustment.

Preparation:

- Before starting this adjustment, adjust the horizontal and vertical static convergence.
- Remove the deflection yolk spacer.

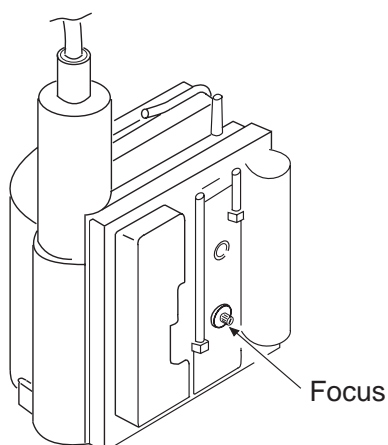
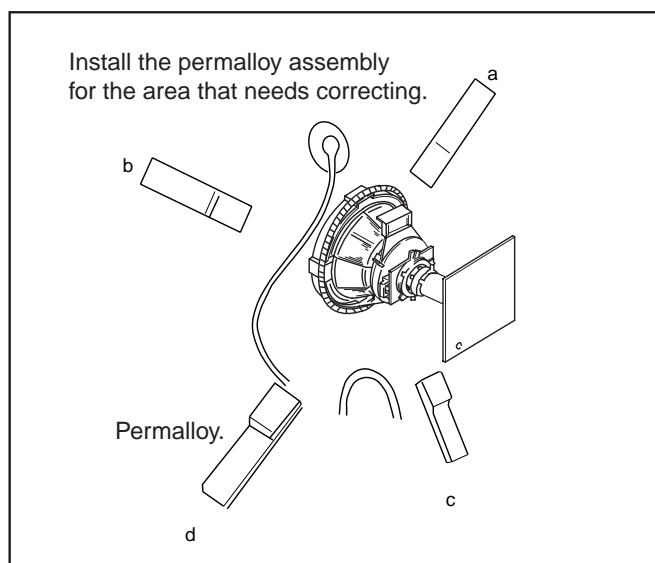
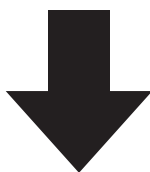
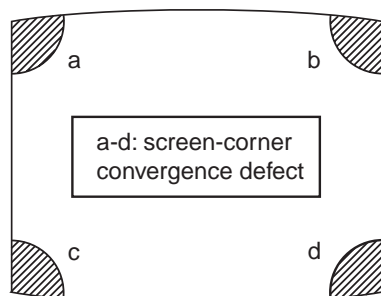
- Tilt the deflection yolk as indicated in the figure below and optimize the convergence.
- Re-install the deflection yolk spacer.

Note : This adjustment will affect the geometry of the display, therefore adjust to obtain the optimum setting.



(3) Screen corner convergence.

- If you are unable to adjust the corner convergence properly, correct them with the use of permalloy assemblies.

**3-3. WHITE BALANCE****G2 Setting**

- Switch the TV set into AV mode [apply a cross-hatch signal].
- Enter into the 'Service mode' and select 'Picture Control'.
- Enter 'Picture Control' and select 'Personal' press OK.
- Return to 'Picture Control' menu and select 'Reset'.
- Measure the voltages on the 3 cathodes of the CRT, Kr, Kg and Kb using an oscilloscope with a 100:1 probe.
- Connect the oscilloscope to the CRT cathode which recorded the highest voltage and adjust [RV702 SCREEN] to obtain a reading of 175V.

White balance adjustment

- Input an all white signal from the pattern generator.
- Enter into the Service Mode.
- Enter into the 'Picture Adjustment' service menu.
- Select 'Sub contrast' and adjust to 7.
- Select the 'Green drive' and adjust so that the white balance becomes optimum.
- Select the 'Blue drive' and adjust so that the white balance becomes optimum.
- Press the 'TV' button on the remote commander to return to TV operation.

PICTURE ADJUSTMENT

AFC mode	1
REF position	2
SCP BGR	1
SCP BGF	1
Trap fo	0
Sub contrast	Adj
Sub colour	Adj
Sub brightness	Adj
Sub hue	Adj
Green drive	Adj
Blue drive	Adj
Green cutoff	Adj
Blue cutoff	Adj
Gamma	0
Pre / overshoot	0
Y delay	3

3-4. FOCUS

- Receive a television broadcast signal.
- Normalise the picture setting.
- Adjust the focus control on the flyback transformer for the best focus at the centre of the screen.
Bring only the centre area of the screen into focus, the magenta ring appears on the screen. In this case, adjust the focus to optimize the screen uniformly.

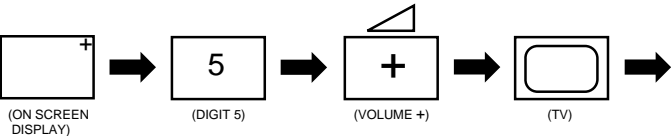
SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustments to this model can be performed using the supplied Remote Commander RM-886.

HOW TO ENTER INTO SERVICE MODE

- 1. Turn on the main power switch and enter into the stand-by mode.
- 2. Press the following sequence of buttons on the Remote Commander.



- ‘TT--’ will appear in the upper right corner of the screen.
Other status information will also be displayed.
- 3. Press ‘MENU’ on the remote commander to obtain the following menu on the screen.

TEST MENU	
>	Picture Adjustment
	Geometry
	Wide
	IC status
	MSP
	Current TV status

- 4. Move to the corresponding adjustment using the button on the remote commander.
- 5. Press the + button to enter the selected adjustment.
- 6. Turn off the power to quit the service mode when adjustments have been completed.

PICTURE ADJUSTMENT

AFC mode	1
REF position	3
SCP BGR	1
SCP BGF	1
Trap fo	7
Sub contrast	Adj
Sub colour	Adj
Sub brightness	Adj
Green drive	Adj
Blue drive	Adj
Green cutoff	Adj
Blue cutoff	Adj
Gamma	0
Pre / overshoot	0
Y delay	5
D Pic	ON/OFF
D Colour	ON/OFF
DC Transfer	ON/OFF

GEOMETRY ADJUSTMENT - 4:3

V size	Adj
V position	Adj
S Correction	Adj
V Linearity	Adj
H size	Adj
H position	Adj
Pin Amp	Adj
Pin Phase	Adj
AFC Bow	Adj
AFC Angle	Adj
EHT V	1
EHT H	0
Lo Corn Pin	Adj
Up Corn Pin	Adj

WIDE ADJUSTMENT - 4:3

V Aspect	47
V Scroll	25
Upper V Lin	0
Lower V Lin	0
Left Blanking	1
Right Blanking	11

MSP

AGC ON/OFF	ON
Constant gain CDB	0
FM prescale FMP	36
Zwei mono-st WHI	36
Zwei st-mono WLO	18
Zwei mono-bi WMH	36
Zwei bi-mono WLO	18
Time Zwei WML	41
Fawct limit	10
Fawct soll init FAW	12
Fawer tol	2
Nicam Err Max CCT	10
Nicam Err Min	0
Nicam Prescale NIP	97
Time Nicam	31
Carrier mute CRM	OFF
Audio clock ACO	HIZ
Scart prescale	25
Scart volume	64

IC STATUS (CXA2076 / CXA2040)

CXA2076	
H lock	1
IKR	1
VNG	0
X-RAY	0
Colour system	3
CV1 sync	1
CXA2040	
Sync sep	1
S1 mode pin	01
S2 mode pin	01
TUNER	
Tuner status	01101011

TV STATUS BE3D

Text system	C TEXT
Dolby	NO
Text language set	WEST/EAST/RUSSIAN
Menu language set	WEST/EAST/RUSSIAN
Destination	B/D/U/K/L/E/A/R
Scart 16:9	ON
RGB priority	ON
Ageing	OFF/ON
Size	29
Colour trap sw	SECAM/ALL
Velocity mod	ON/OFF
AFT STATUS	WINDOW/HIGH/LOW
Lumisponder Mode	OFF
Micro/Jungle	SDA30C263/CXA2076

SUB BRIGHTNESS ADJUSTMENT

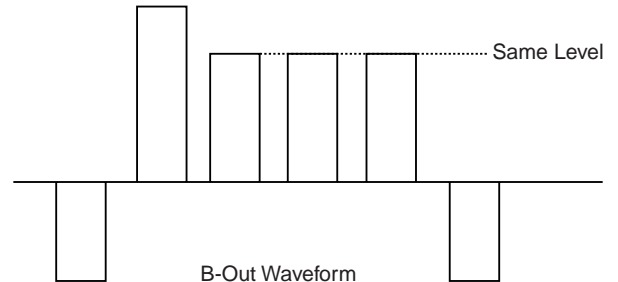
1. Input a Phillips pattern.
2. Set the picture control to minimum.
3. Enter into the 'Picture Adjustment' service menu.
4. Adjust the 'Sub-Brightness' data so that there is barely a difference between the 0 IRE and 10 IRE signal levels.

SUB CONTRAST ADJUSTMENT

1. Input a video that contains a small 100% area on a black background.
2. Set the picture control to maximum.
3. Connect an oscilloscope to Pin 3 of CN301 [A Board].
4. Enter into the 'Picture Adjustment' service menu.
5. Adjust the 'Sub-contrast' data to obtain a black to white amplitude of 2.50V.

SUB COLOUR ADJUSTMENT

1. Receive a PAL colour bar video signal.
2. Connect an oscilloscope to Pin 3 of CN301 [A Board].
3. Enter into the 'Picture Adjustment' service menu.
4. Adjust the 'Sub-colour' data so that the Cyan, Magenta and Blue colour bars are of equal height as indicated below.



Note: The data indicated in the 'TV STATUS' table is dependant on destination, screen size and country.

SYSTEM B/G, D/K, I & L I.F ADJUSTMENT

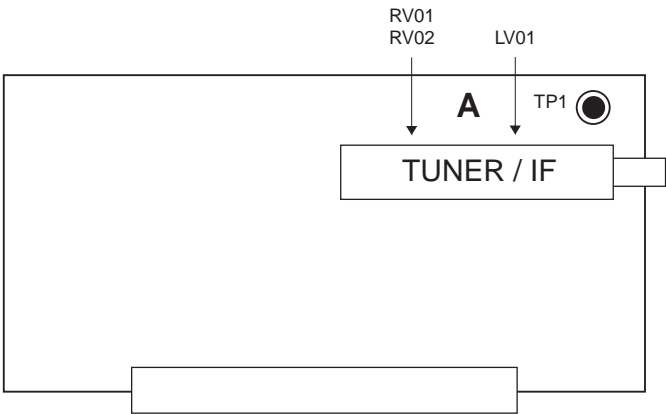
- 1. Input an off air signal of between 60-100dBuV / 75 ohm terminated, via the tuner socket.
- 2. Enter into the 'IF Adjustment' service mode [i.e 'TT59'] to fix the I.F frequency to 39.9MHz.
- 3. Enter into the service mode and select 'Current TV status'.
- 4. Adjust the I.F coil [LV01] until the 'AFT Status' indicates a 'Window' condition.

SYSTEM L BAND 1 I.F ADJUSTMENT

- 1. Input an off air signal of between 60-100dBuV / 75 ohm terminated, via the tuner socket.
- 2. Enter into the 'IF Adjustment' service mode [i.e 'TT59'] to fix the I.F frequency to 34.2MHz.
- 3. Enter into the service mode and select 'Current TV status'.
- 4. Adjust the RV02 control until the 'AFT Status' indicates a 'Window' condition.

TUNER AGC ADJUSTMENT

- 1. Receive a signal of 63dBuV / 75 ohm terminated, via the tuner socket.
- 2. Measure the voltage at test point 1 [A Board].
- 3. Adjust RV01 control to obtain a voltage of 3.0V +/- 0.3V.

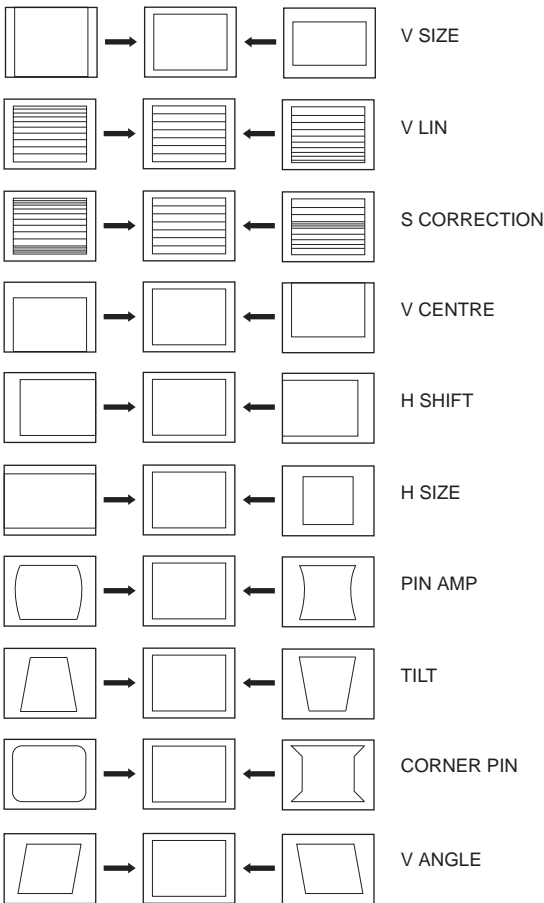


DEFLECTION SYSTEM ADJUSTMENT

- 1. Enter into the 'Geometry Adjustment' service menu.
- 2. Select and adjust each item in order to obtain the optimum image.

GEOMETRY ADJUSTMENT

V size	Adj
V position	Adj
S Correction	Adj
V Linearity	Adj
H size	Adj
H position	Adj
Pin Amp	Adj
Pin Phase	Adj
AFC Bow	Adj
AFC Angle	Adj
EHT V	1
EHT H	0
Lo Corn Pin	Adj
Up Corn Pin	Adj



4-2. TEST MODE 2:

Is available by pressing 'TEST' button twice, OSD 'TT' appears. The functions described below are available by pressing the two numbers. To release the Test mode 2, press 0 twice, or switch the TV into stand-by mode.

Note : 'TT' modes 40 - 49 require the TV set to be in programme 59 before the command is accepted. Some test modes are dependant upon the model.

00	Carrier Test mode
01	Picture maximum
02	Picture minimum
03	Volume 30%
04	Volume 50%
05	Volume 65%
06	Volume 80%
07	Ageing mode
08	Set shipping conditions
09	Reset language select menu on power up
10	No function
11	Clear & Disable OSD
12	Enable OSD
13	Scart 16:9 Enable / Disable
14	Display TV status
15	Picture reset
16	Set 32" chassis (Wide models only)
17	Set all AV labels to default
18	RGB priority Enable / Disable
19	Set all programme labels to default
20	No function
21	Sub picture adjustment (use red/yellow)
22	Sub colour adjustment (use red/yellow)
23	Sub brightness adjustment (use red/yellow)
24	Destination U
25	Destination D
26	Destination B
27	Destination K
28	Destination L
29	Destination E
30	No function
31	Destination A
32	Destination R
33	Sub Woofer Enable
34	Sub Woofer Disable
35	Set up trap switch
36	Rotation test
37	Set 25" (24" Wide models)
38	Set 29" (29" Wide models)
39	D/K Nicam enable
40	No function
41	Re-initialize the NVM

42	Default Programme info in NVM with manufacturing factory channel setup
43	Default Geometry settings
44	Default favourite pages to 100,101,102 and 103
45	Switch off all channel locks
46	Dealer commander mode (pending)
47	Default MSP settings
48	Restore NVM test byte Undo 'TT49'
49	Delete NVM test byte Sets virgin NVM
50	No function
51	Text interface odd (NON INTERLACED MODE = 3)
52	Text interface odd (NON INTERLACED MODE = 2)
53	Auto picture ON
54	Auto picture OFF
55	Auto cut off ENABLE
56	Auto cut off DISABLE
57	AV3 ENABLE
58	AV3 DISABLE (if TV Text) otherwise AV3 ENABLE
59	Auto IF Display
60	No function
61	Dolby Pro-Logic ON
62	Noise Left
63	Noise Right
64	Noise Centre
65	Noise Surround

66	DSP Bypass
67	D/K Nicam Disable
68	Diagnostics OFF
69	Diagnostics ON
70	No function
71	Lumisponder Curve 1
72	Lumisponder Curve 2
73	Jungle Select (CXA2000 or CXA2076)
74	Text H Position adjust
75	Picture reset
76	MSP BG filter enabled (h/w required)
77	Sound reset
78	MSP BG filter disabled (h/w required)
79	Wide set-up (Wide screen models only)
80	No function
81	Velocity mod ON
82	Velocity mod OFF
83	Picture Rise step 40ms
84	Picture Rise step 80ms
85	Picture Rise step 160ms
86	Picture Rise OFF
87	Select Shop Mode
88	Compact Text Acquisition Disable
89	Compact Text Acquisition Enable
90	No function
91	Sound Centre mode NORMAL
92	Sound Centre mode WIDE
93	Sound Centre mode PHANTOM
94	Toggle Compact Text Acquisition Delay Bit 0
95	Toggle Compact Text Acquisition Delay Bit 1
96	Toggle Compact Text Acquisition Delay Bit 2
97	Toggle Compact Text Acquisition Delay Bit 3
98	Toggle Compact Text Acquisition Delay Bit 4
99	Set test menu

The shaded test modes indicated in bold can set the delay byte to any value 0-31 which creates a (value x 20) mS delay.
Note: Compact Text models only.

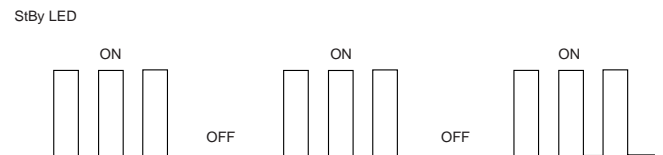
4-3. BE-3D SELF DIAGNOSTIC SOFTWARE

The identification of errors within the BE-3D chassis is triggered in one of two ways :- 1: Busy busy or 2: Device failure to respond to IIC. In the event of one of these situations arising the software will first try to release the bus if busy [Failure to do so will report with continuous flashing LED] and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the LED [Series of flashes which must be counted] See Table 1., non fatal errors are reported using this method.

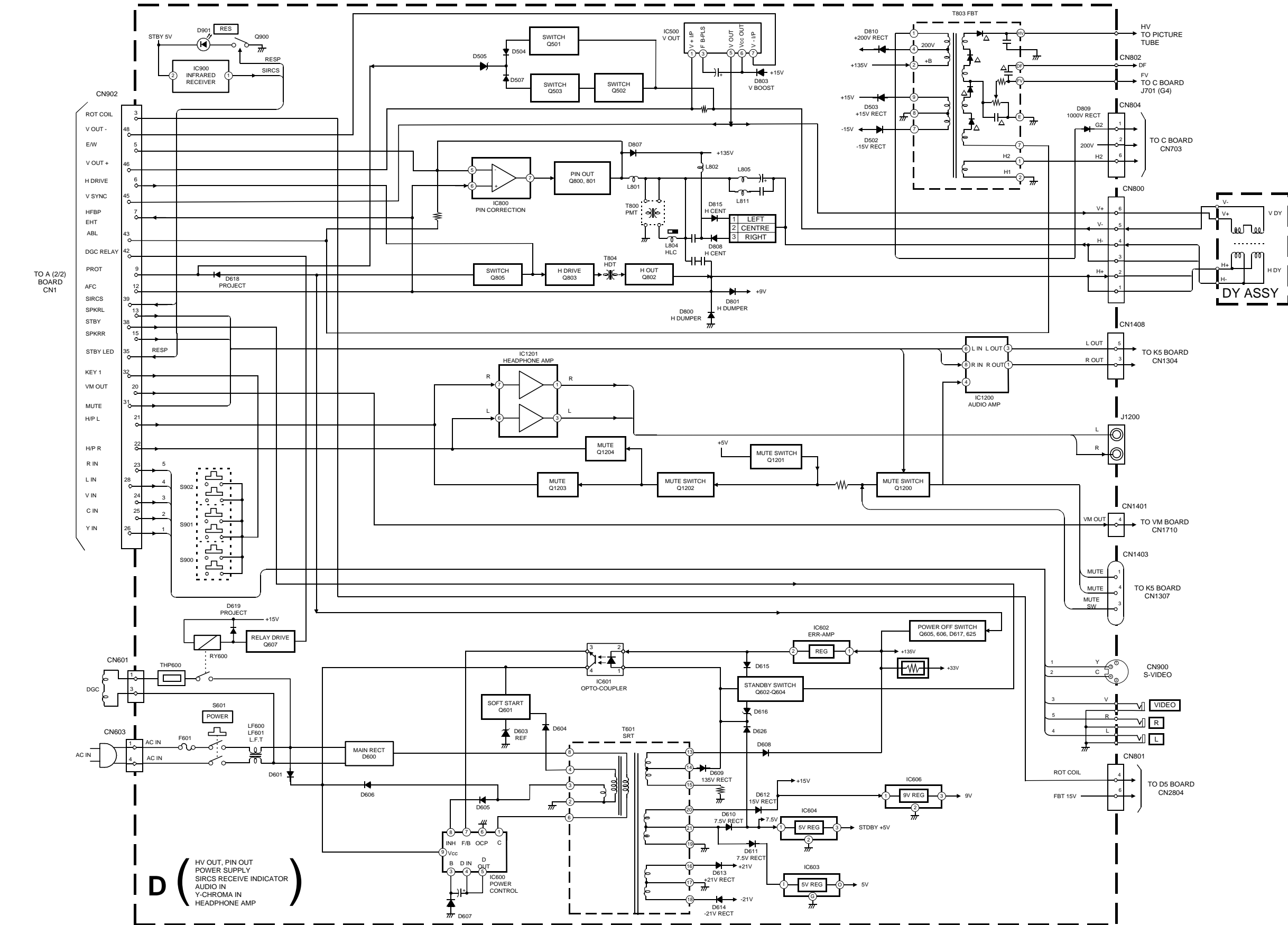
ERROR	LED ERROR COUNT
No error	00
Not allowed (may be confused with Sircs response flash!)	01
Protection circuit trip < ANY TIME >	02
IIC SCL LOW < POWER UP ONLY >	03
IIC SDA LOW < POWER UP ONLY >	04
IIC SDA & SCL LOW < POWER UP ONLY >	05
Jungle / Chroma controller no acknowledge < POWER UP ONLY >	06
Video Switch no acknowledge < POWER UP ONLY >	07
Tuner no acknowledge	08
MSP no acknowledge	09
NVM no acknowledge	10
M3L TXD Low < POWER UP ONLY >	11
M3L RXD Low < POWER UP ONLY >	12
M3L ENABLE Low < POWER UP ONLY >	13
M3L TXD & RXD Low < POWER UP ONLY >	14
Compact Text test fail < POWER UP ONLY >	15
AV switch cannot power on reset < Chassis Initialisation >	16
Cannot initialise jungle (after initial power on checked out OK) - < Chassis initialisation >	17
NVM acknowledge fail after initialisation (STBY +5V same as micro!)	18
Multiple devices with no acknowledge < POWER UP ONLY >	19
Compact text run-time failure after power up check (+9V test)	20
AV SWITCH response failure after power up check (+9V test)	21
JUNGLE / CHROMA controller response failure after power up check (-9V test)	22
Compact text does not respond (-5V test)	23
MSP run-time failure < MAY NOT BE FATAL-DISPLAY ON ERROR READER >	24

M3L bus Clock low time out after data send (run-time failure)	25
M3L bus Clock low time out after data send (at power up check)	26
M3L bus Clock low time out after data send (at initialisation)	27
DSP run-time failure < MAY NOT BE FATAL-DISPLAY ON ERROR READER >	28

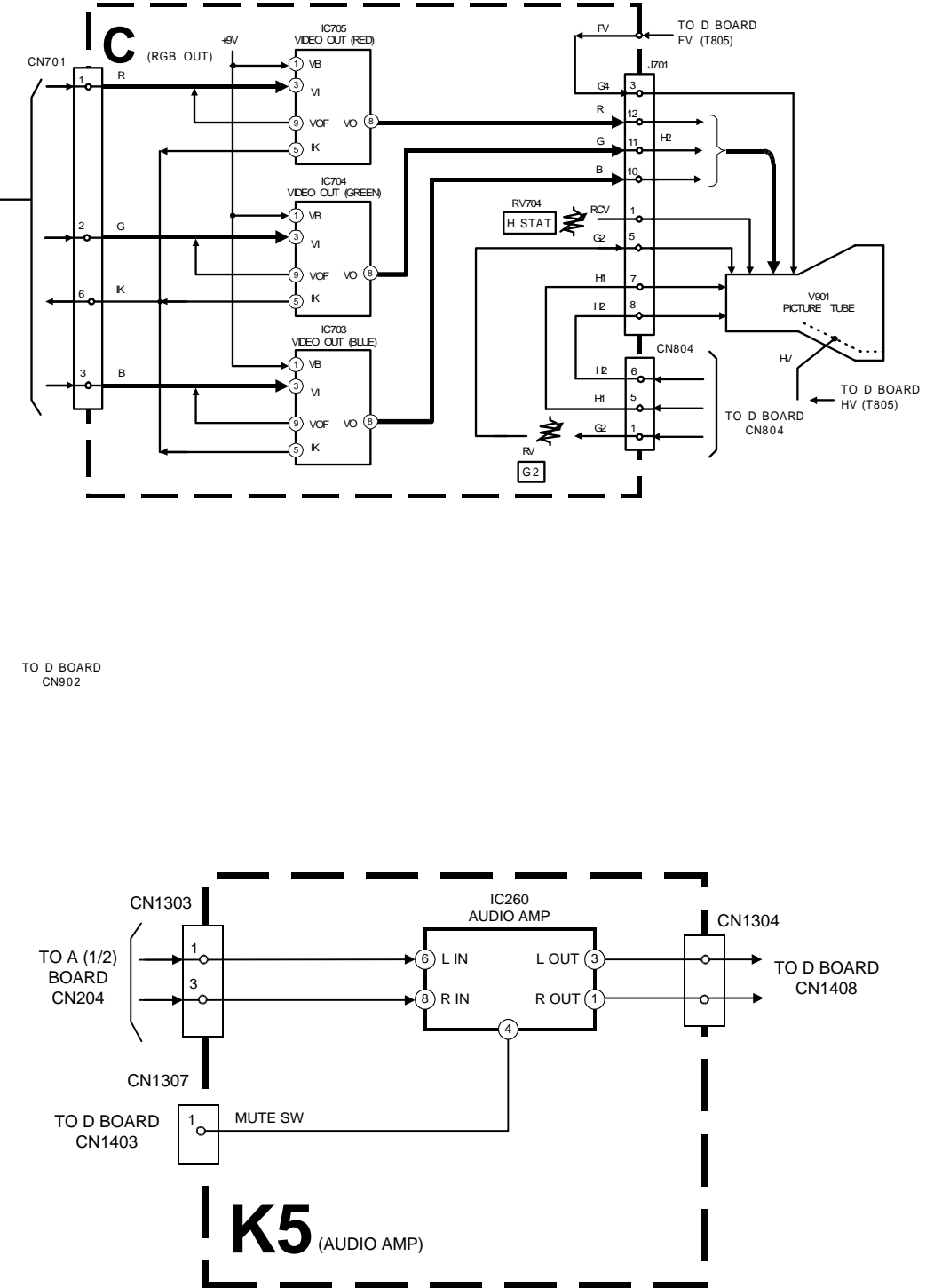
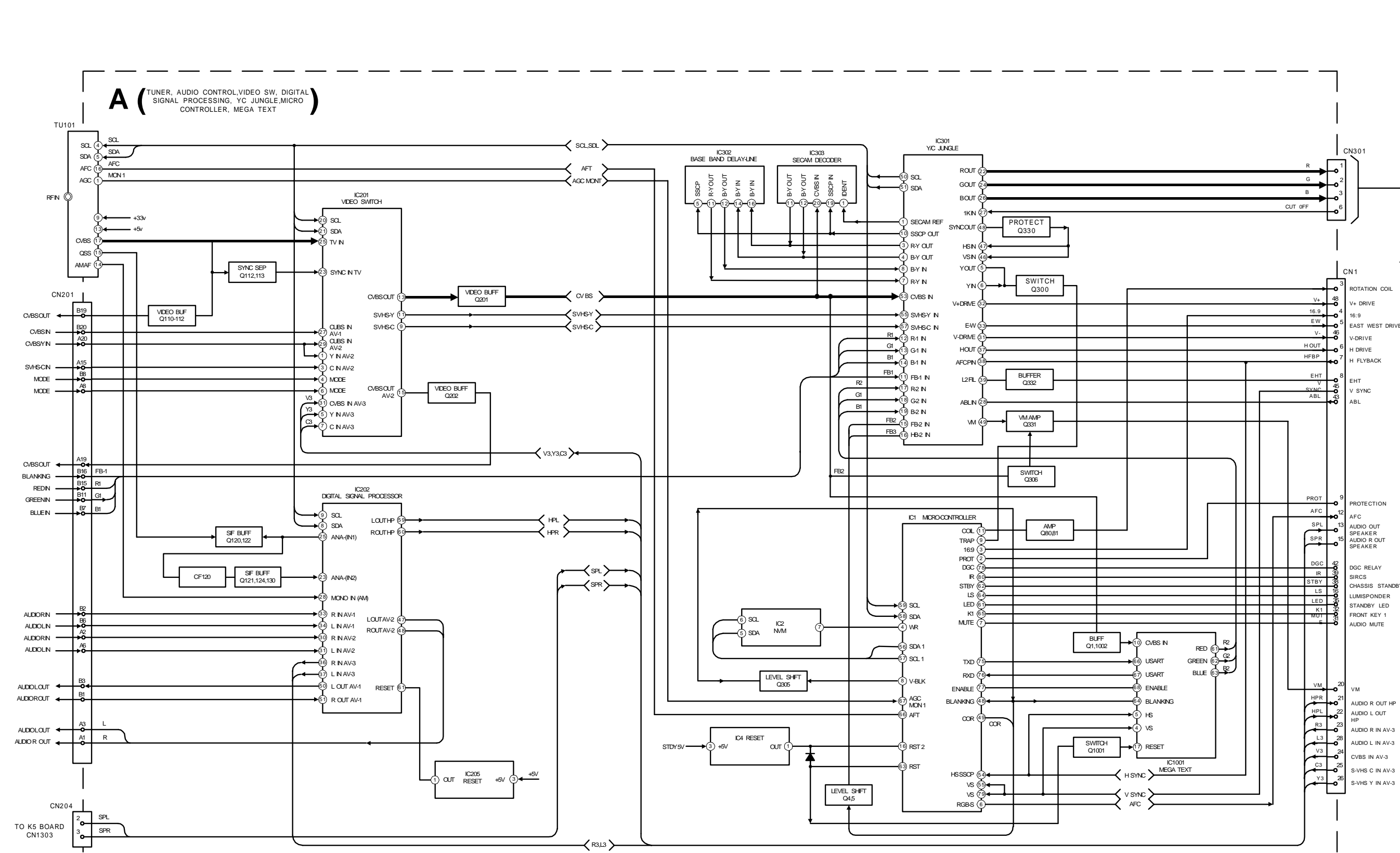
Flash Timing Example : e.g. error number 3



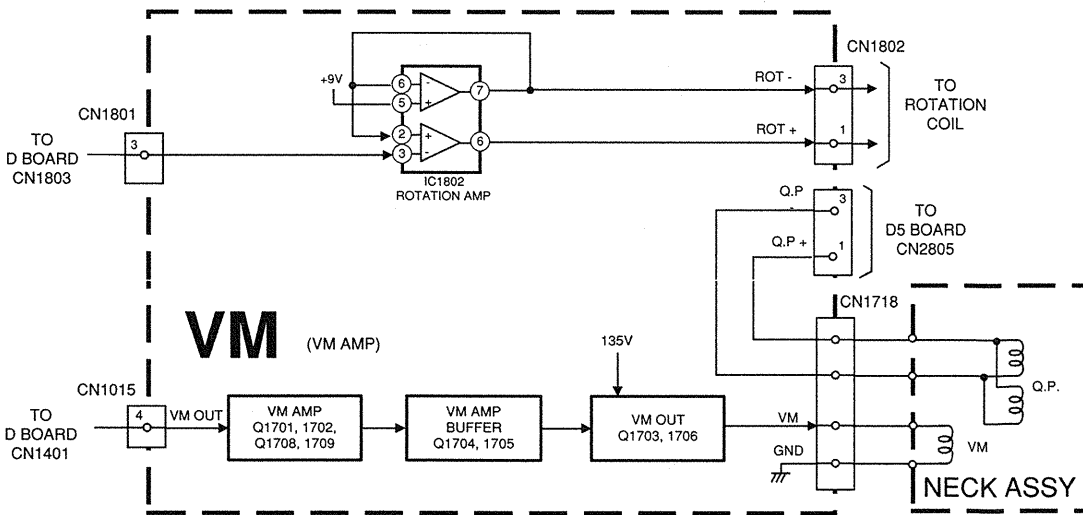
SECTION 5 DIAGRAMS BLOCK DIAGRAM (1)



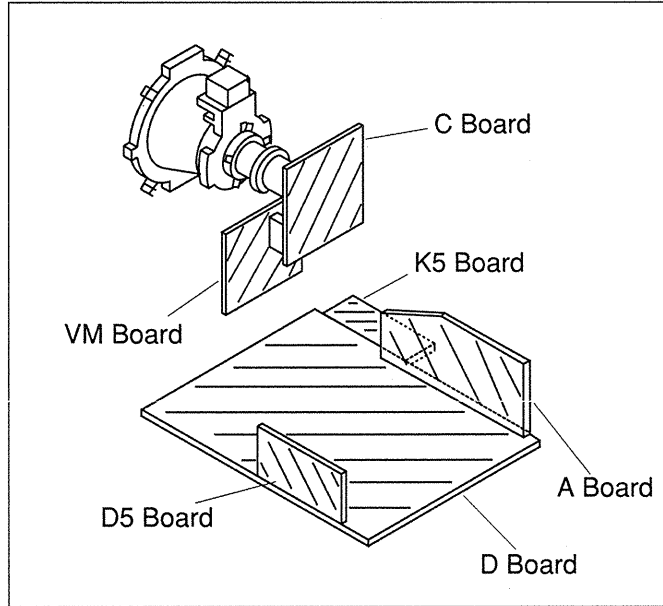
BLOCK DIAGRAM (2)



BLOCK DIAGRAM (3)



5-2. CIRCUIT BOARD LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

- Note :**
- All capacitors are in μF unless otherwise noted.
 - μF : μF 50WV or less are not indicated except for electrolytic types.
 - Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5mm
Electrical power rating : 1/4W

- Chip resistors are 1/10W
- All resistors are in ohms.
 $k = 1000 \text{ ohms}$, $M = 1000,000 \text{ ohms}$
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation or adjustment for repair.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in Volts.
- Readings are taken with a 10Mohm digital multimeter.
- Readings are taken with a color bar input signal.
- Voltage variations may be noted due to normal production tolerances.

- : B + bus.
- : B - bus.
- : RF signal path.
- : earth - ground.
- : earth - chassis.

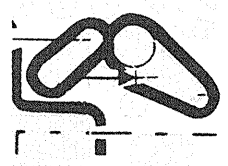
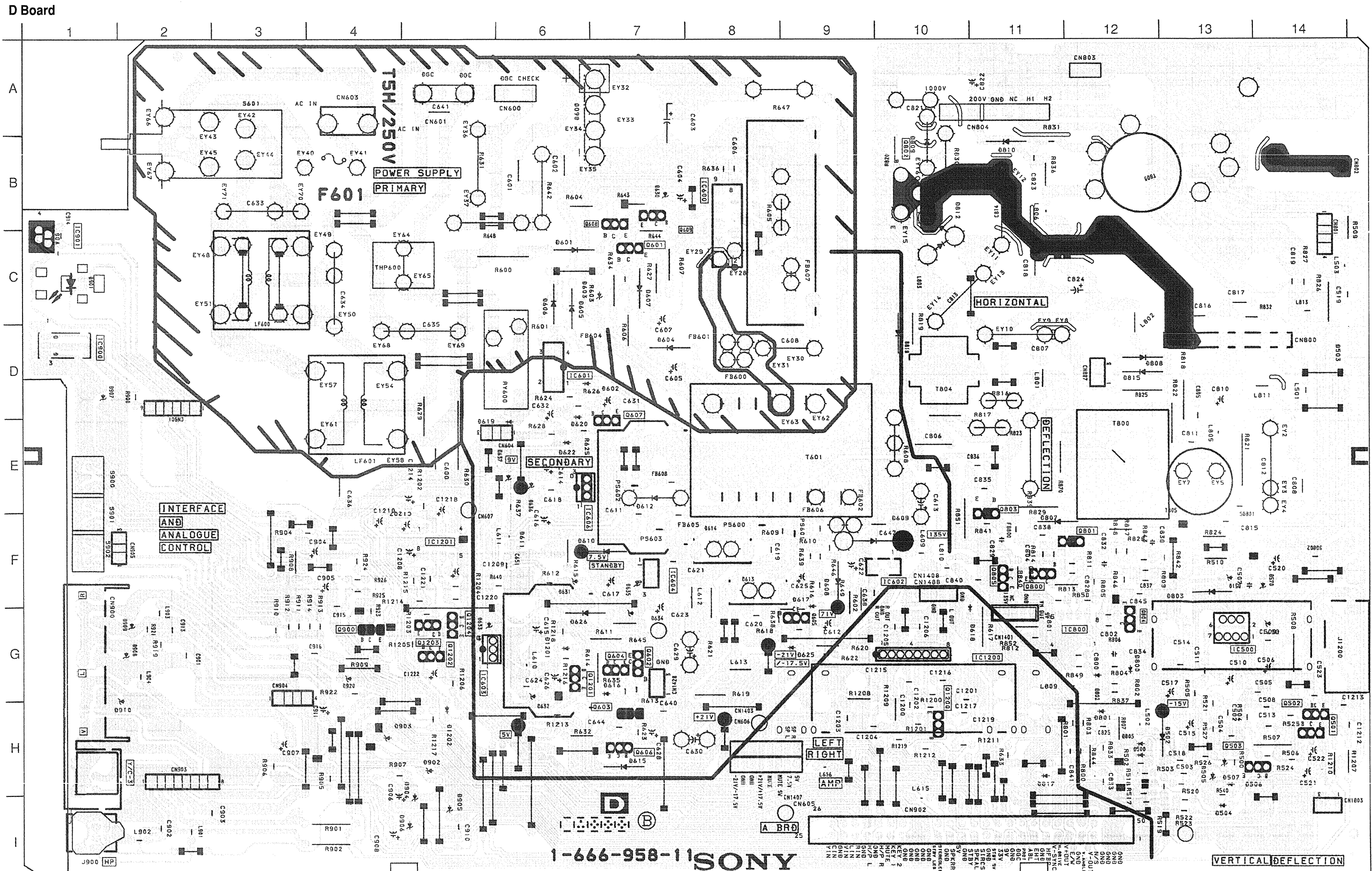
Reference Information

RESISTOR	RN	: METAL FILM
	RC	: SOLID
	FPRD	: NON FLAMMABLE CARBON
	FUSE	: NON FLAMMABLE FUSIBLE
	RS	: NON FLAMMABLE METAL OXIDE
	RB	: NON FLAMMABLE CEMENT
	RW	: NON FLAMMABLE WIREWOUND
		: ADJUSTMENT RESISTOR
COIL	LF-8L	: MICRO INDUCTOR
CAPACITOR	TA	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

Note : The components identified by shading and marked are critical for safety. Replace only with the part numbers specified in the parts list.

Note : Les composants identifiés par une trame et par une marque sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

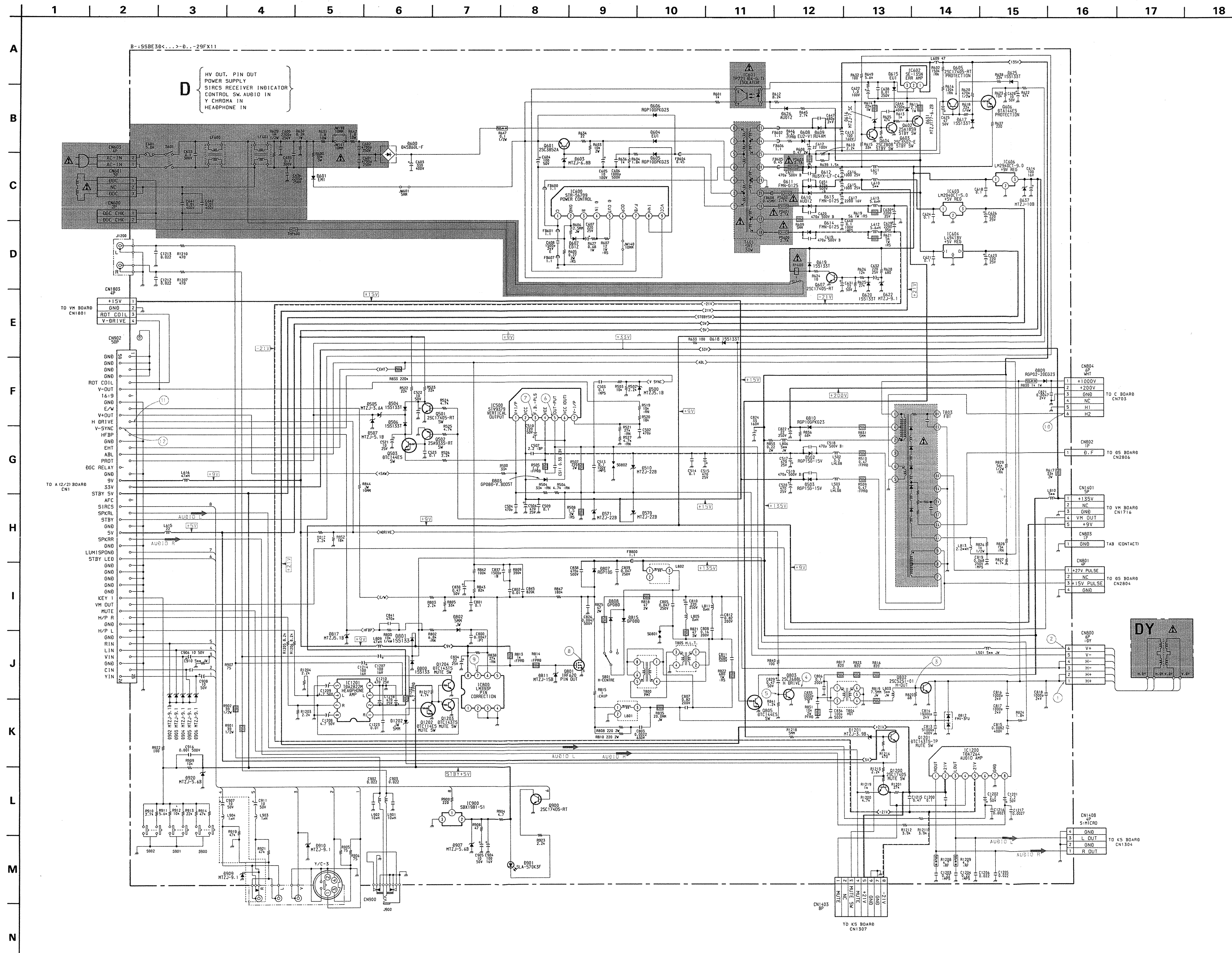
D HV OUT, PIN OUT, POWER SUPPLY, SIRCS RECEIVE INDICATOR, AUDIO IN, Y-CHROMA IN, HEADPHONE AMP



Note:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

D BOARD

IC		DIODE	
IC500	G - 13	D600	A - 7
IC600	B - 8	D601	C - 6
IC601	D - 6	D603	C - 7
IC602	F - 10	D604	D - 7
IC603	G - 5	D605	C - 6
IC604	F - 7	D606	C - 6
IC606	E - 6	D607	C - 7
IC800	F - 12	D608	F - 9
IC900	D - 1	D609	F - 9
IC1200	G - 10	D610	F - 7
IC1201	F - 5	D611	F - 6
		D612	E - 7
		D613	F - 8
		D614	F - 8
		D615	H - 7
		D616	G - 7
		D617	F - 9
		D618	F - 11
		D619	E - 6
		D620	E - 6
		D622	E - 6
		D625	G - 9
		D626	G - 6
		D631	F - 6
		D800	F - 12
		D801	G - 12
		D802	G - 12
		D803	F - 13
		D807	E - 12
		D808	E - 14
		D809	A - 14
		D810	A - 13
		D812	B - 11
		D815	E - 14
		D817	H - 11
DIODE			
D500	H - 12	D901	C - 1
D502	H - 13	D902	I - 5
D503	I - 14	D903	H - 4
D504	H - 11	D904	H - 5
D505	H - 13	D905	I - 5
D506	I - 14	D906	I - 5
D507	H - 13	D1201	G - 6



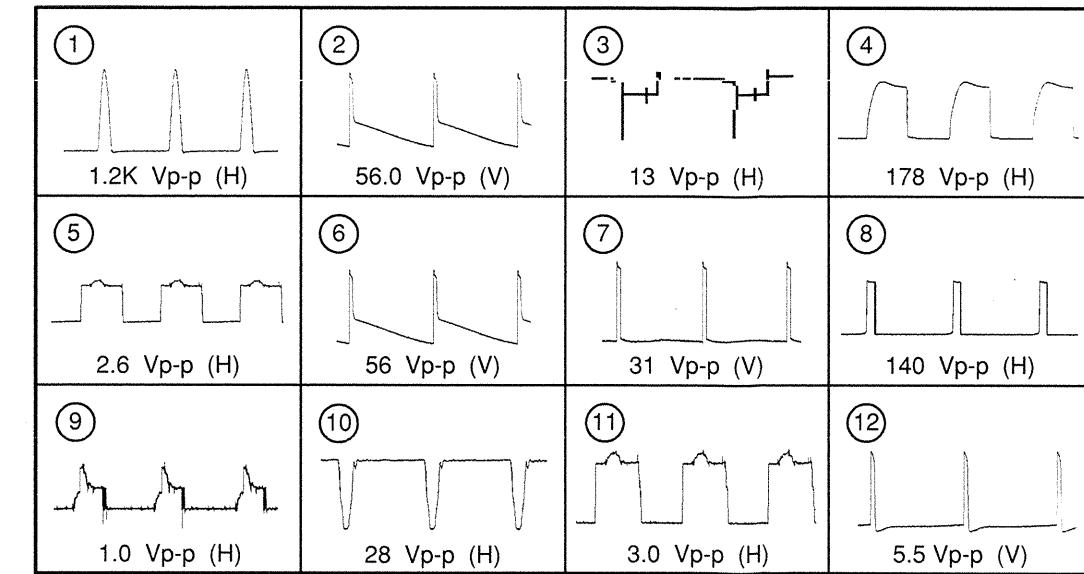
D BOARD
TRANSISTOR VOLTAGE TABLE

Ref No	(B) Base	(C) Collector	(E) Emitter
Q501	-0.1	0.2	-
Q502	0.1	-5.8	-
Q503	-5.8	-12.0	-12.0
Q602	72.0	7.5	72.7
Q603	0	72.0	-
Q604	0.7	-	-
Q605	0.5	-	0.3
Q606	-	-	12.0
Q607	-	12.0	-
Q800	0.2	3.1	-
Q801	0.3	17.0	-
Q802	-0.2	143.3	-
Q803	-0.6	99.8	-
Q805	-	3.6	-
Q900	-	5.4	-
Q1200	2.9	21.5	4.6
Q1201	3.4	5.0	3.0
Q1202	2.8	-	-

D BOARD
IC VOLTAGE TABLE

Ref No	Pin No	Voltage (V)
IC500	1	1.5
	2	15.0
	3	-12.3
	4	-14.0
	5	0.1
	6	15.2
	7	1.4
IC600	1	170.0
	2	-62.4
	3	-62.6
	4	-62.2
	5	-62.0
	6	-62.0
	7	-62.4
IC601	1	64.3
	2	63.0
	3	-62.5
	4	-58.6
	5	-0.1
	6	0.9
	7	1.5
IC800	1	135.0
	2	63.2
	3	-0.1
	4	0.9
	5	1.5
	6	2.0
	7	0.2
IC1200	1	9.0
	2	21.7
	3	4.2
	4	21.5
	5	-21.7
	6	9.0
	7	0.5

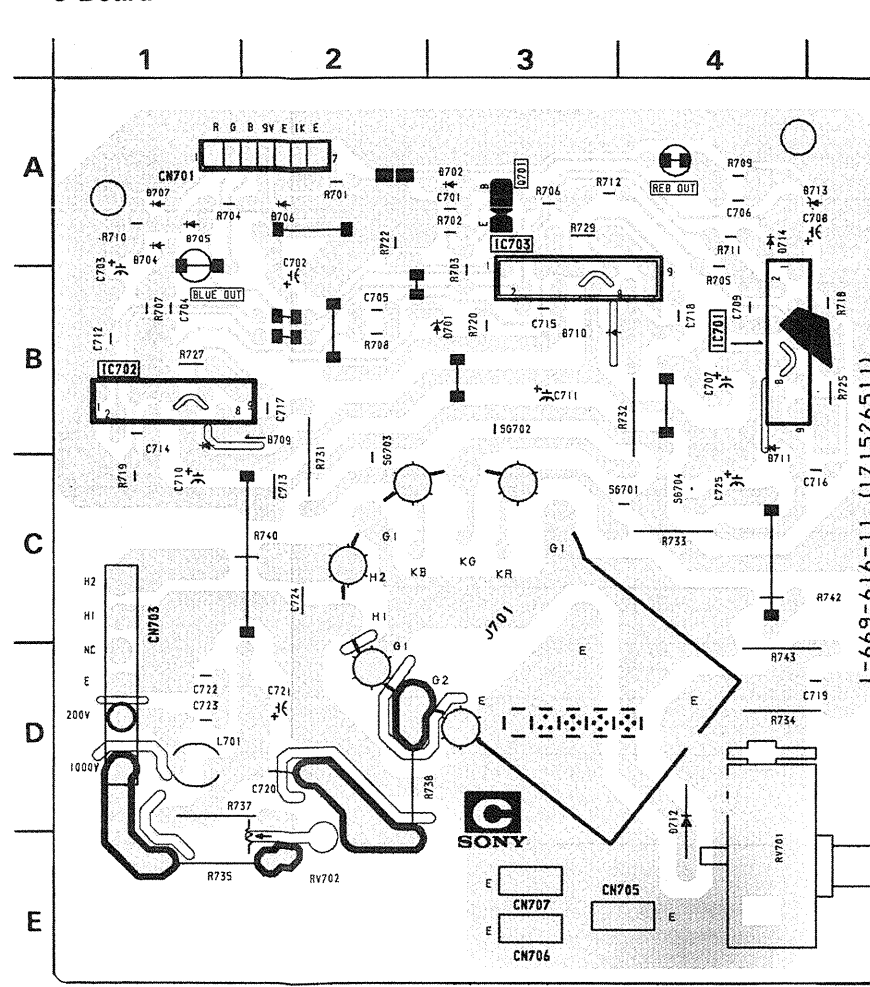
WAVEFORMS D BOARD



C BOARD

IC	Pin No	Voltage (V)
IC701	B - 4	
IC702	B - 1	
IC703	A - 3	
TRANSISTOR		
Q701	A - 3	
DIODE		
D701	B - 3	
D704	A - 1	
D705	A - 1	
D707	A - 1	
D709	B - 1	
D710	B - 3	
D711	B - 4	
D712	D - 4	
D713	A - 4	
D714	A - 4	

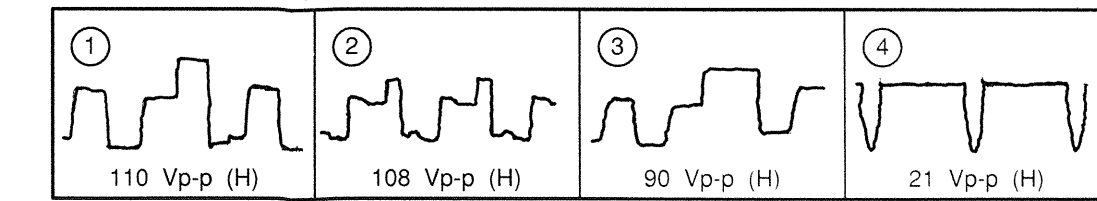
C Board

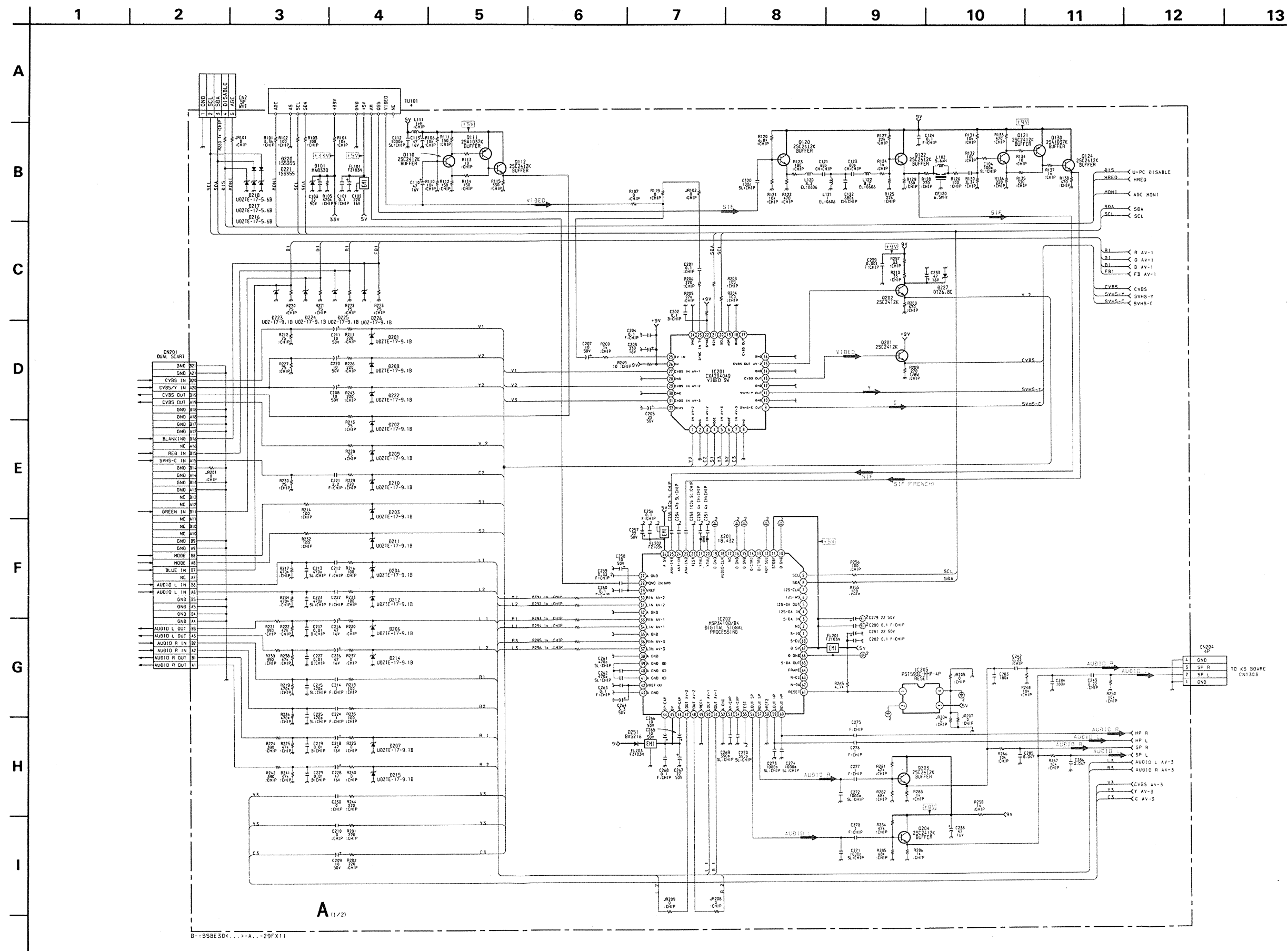


C BOARD
IC VOLTAGE TABLE

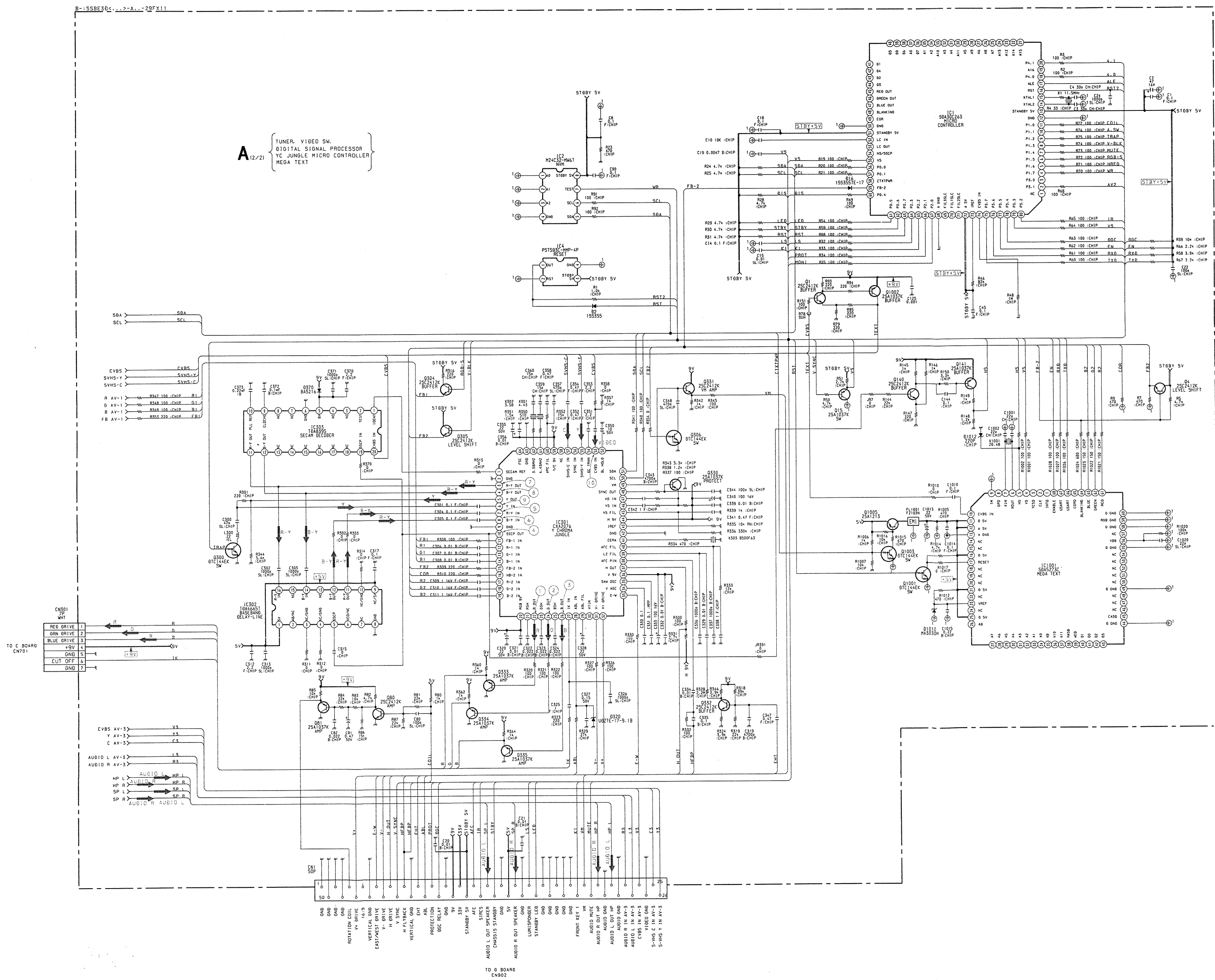
Ref No	Pin No	Voltage (V)
IC703	1	3.6
	2	11.4
	3	3.6
	5	7.5
	6	195.0
IC704	7	102.0
	8	104.0
	9	101.0
	1	3.6
	2	11.4
IC705	3	3.6
	5	7.5
	6	195.0
	7	103.0
	8	107.0
	9	102.0
	1	3.6
	2	11.4
	3	3.6
	5	6.4
	6	195.0
	7	97.0
	8	100.0
	9	96.8

WAVEFORMS C BOARD





Ref	29FX11A	29FX11B	29FX11D	29FX11E	29FX11K	29FX11R	29FX11U
TUV101	TUV1F (AEP)	TUV1F (FR)	TUV1F (AEP)	TUV1F (AEP)	TUV1F (AEP)	TUV1F (AEP)	TUV1F (UK)

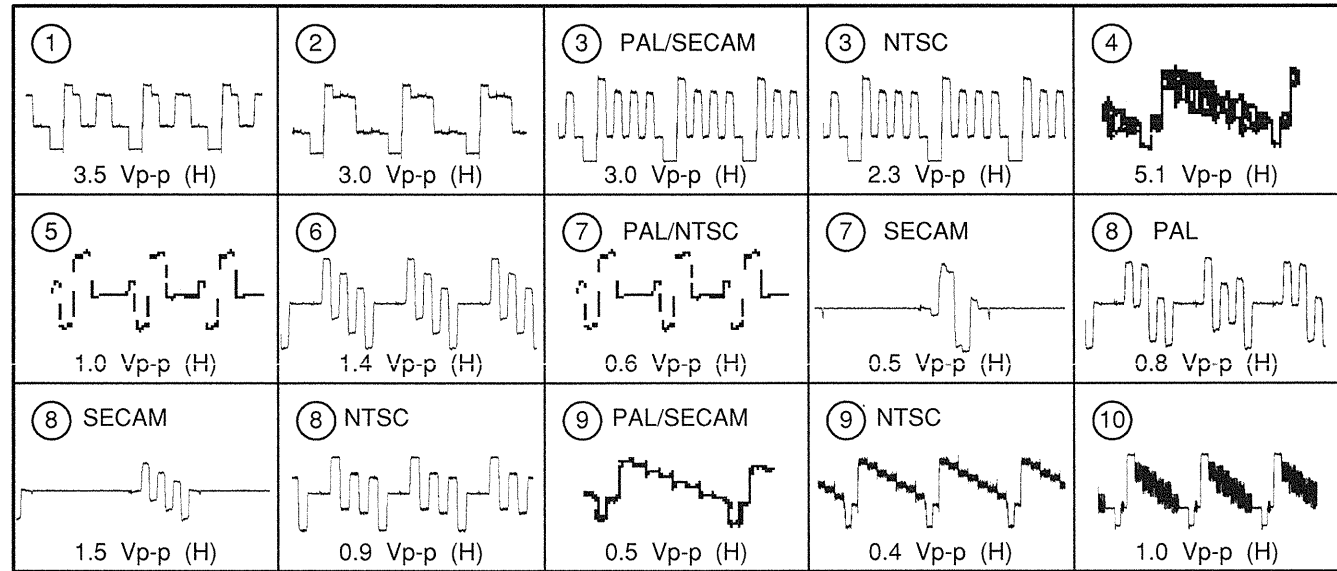


Ref No	Pin No	Voltage (V)
IC201	13	4.4
	15	4.4
	20	3.5
	21	2.7
	22	4.9
	23	4.4
	24	0
	25	4.4
	26	8.8
	32	4.4
IC202	4	2.8
	6-7	0.1
	8	3.0
	9	3.6
	11	4.7
	13	4.7
	20-21	2.4
	23	0.2
	25	1.5
	26	4.8
	28	3.8
	29	2.6
	39-42	3.8
	44	7.1
	45	8.0
	46	7.1
	47-48	3.8
	53-54	3.8

A (1/2) BOARD
TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	(B) Base	(C) Collector	(E) Emitter
Q110	1.8	8.2	1.2
Q112	1.5	8.8	0.8
Q113	1.8	-	-
Q114	5.4	6.0	-
Q120	84.3	8.8	3.7
Q121	1.5	5.4	0.9
Q122	5.4	8.8	4.7
Q124	-	8.8	-
Q201	4.4	8.8	3.7
Q202	4.4	8.8	3.7

WAVEFORMS A BOARD

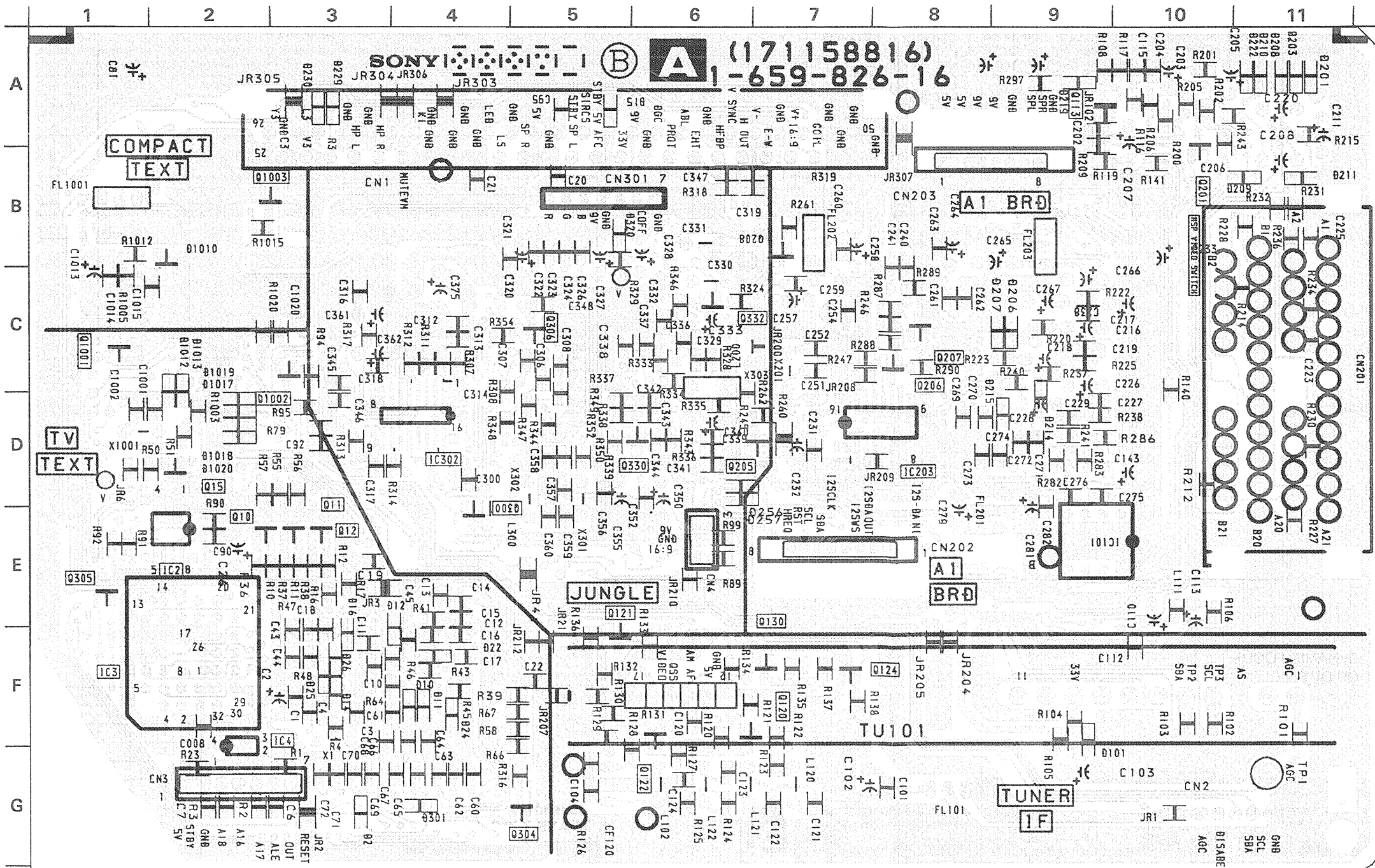


A (2/2) BOARD IC VOLTAGE TABLE

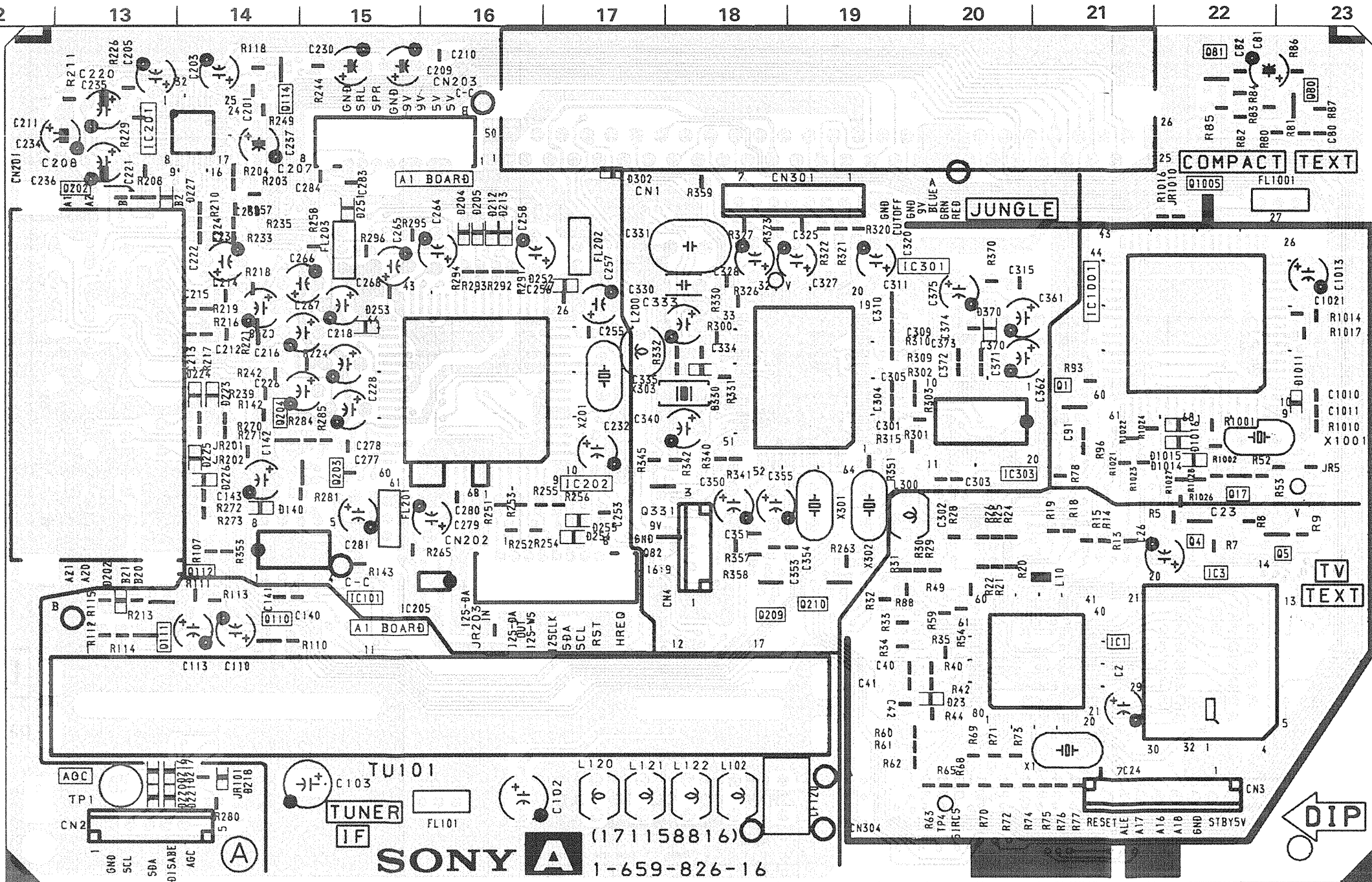
IC Voltage Table			IC Voltage Table		
Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)
IC1	2	3.6	IC301	6	5.0
	3-4	4.8		7-8	5.4
	5	0.5		10	0.6
	7	4.8		12-14	5.4
	9	4.8		16	4.0
	11	2.4		17-19	5.4
	13	4.8		20	8.8
	14-15	2.3		22-23	2.2
	16-17	4.8		24	2.0
	48	4.0		25	2.4
	51	4.8		26	2.0
	52-53	2.4		27	4.0
	54	0.7		28	6.6
	55	0.2		29	8.8
	56-57	4.8		31-33	3.0
	58	2.8		34	4.0
	59	3.5		35	4.6
	60	2.4		36	8.8
	62	0.7		37	3.1
	63	4.4		38	3.4
IC2	5-8	4.8	IC302	39	5.3
	1	4.8		40	4.2
	3	4.8		41	2.3
	1	1.5		43	1.7
	3-4	5.6		44	8.8
	5	3.6		45	2.5
				46	3.9
				47	3.0
				48	4.4
				49	6.3
IC4	1	4.8	IC303	50-51	0.1
	3	4.8		53	3.9
	5	3.6		54	5.0
IC301	1	1.5	IC1001	55-56	4.2
	3-4	5.6		58-59	8.8
	5	3.6		60	5.3

A [TUNER, AUDIO CONTROL, VIDEO SW, DIGITAL SIGNAL PROCESSING]
YC JUNGLE, MICRO CONTROLLER, MEGA TEXT

A Board < Conductor Side >

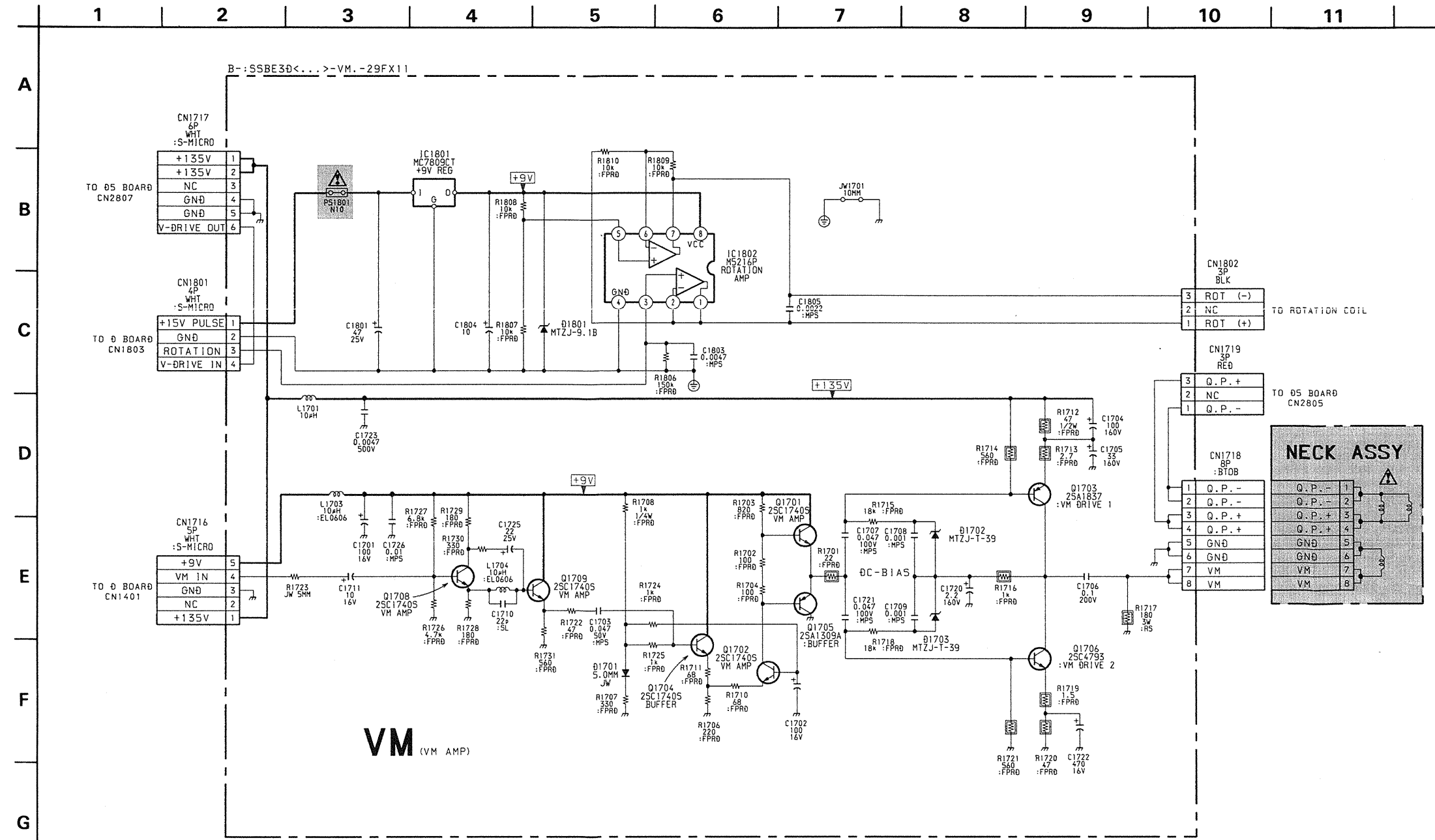


A Board < Component Side >



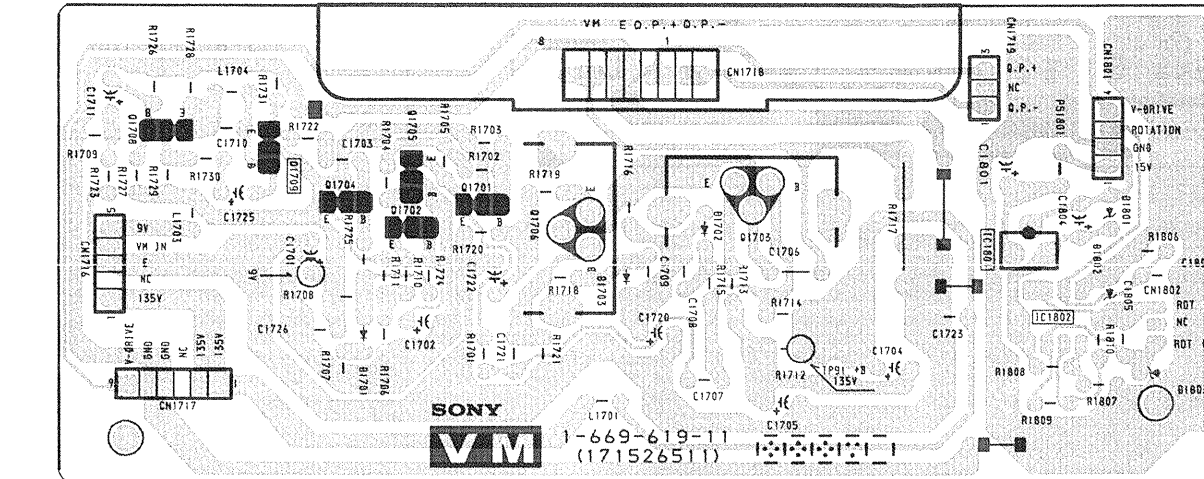
A BOARD

IC		Q1002	C-3
IC1	F-21	Q1003	D-14
IC2	E-2	DIODE	
IC4	G-2	D2	G-3
IC201	A-14	D101	F-9
IC202	C-16	D201	A-11
IC301	C-19	D202	E-13
IC302	D-4	D203	A-11
IC303	D-21	D204	B-16
IC1001	G-14	D206	C-9
TRANSISTOR		D207	C-9
Q1	D-21	D208	A-11
Q4	E-22	D209	B-11
Q15	D-2	D210	A-11
Q80	A-23	D211	B-11
Q81	A-22	D212	B-16
Q110	F-14	D214	D-9
Q111	E-14	D215	D-9
Q112	E-14	D216	G-14
Q120	F-7	D217	G-14
Q121	F-5	D218	G-14
Q122	F-6	D220	G-14
Q124	F-7	D221	D-14
Q130	F-7	D222	D-14
Q201	B-10	D223	D-14
Q202	B-13	D224	D-14
Q203	D-15	D225	D-14
Q204	D-15	D226	D-14
Q300	E-4	D227	B-14
Q304	G-5	D251	B-15
Q305	E-1	D320	C-5
Q306	C-5	D370	C-21
Q330	D-6	D1010	C-10
Q331	D-18		
Q332	C-6		



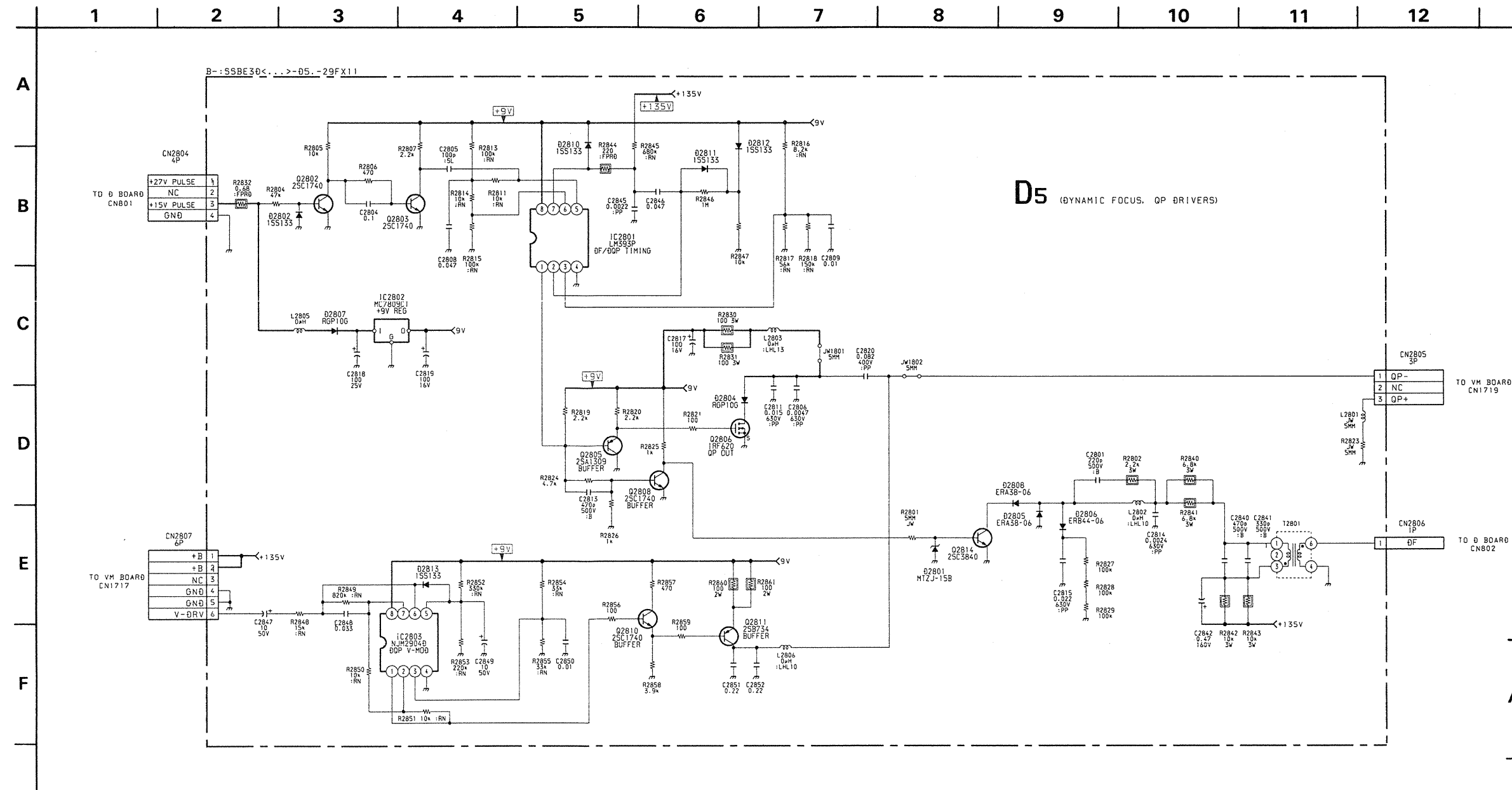
VM [VM AMP]

VM Board



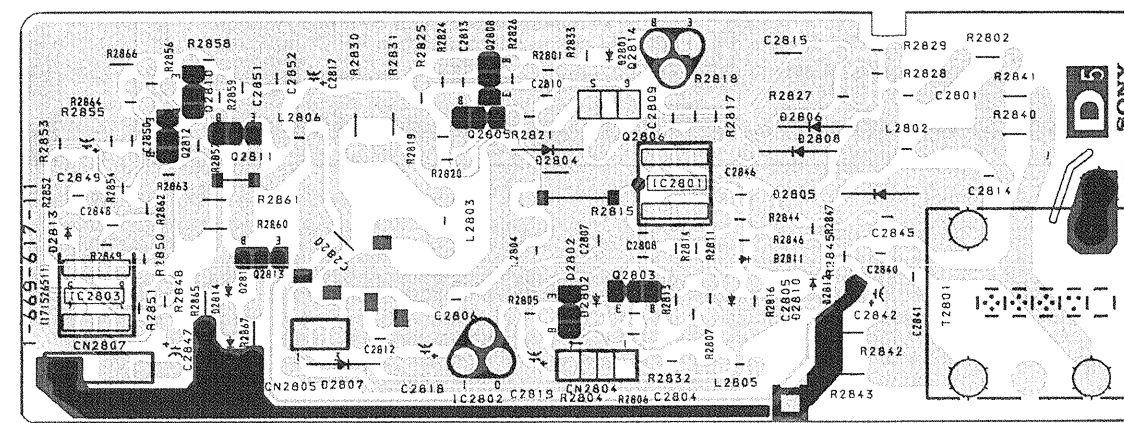
**VM BOARD
TRANSISTOR VOLTAGE TABLE**

Transistor Voltage Table				
Ref No	(B) Base	(C) Collector	(E) Emitter	
Q1701	2.5	8.8	1.8	
Q1702	2.5	5.5	1.8	
Q1703	134.3	71.8	134.8	
Q1704	5.5	8.8	4.8	
Q1706	1.0	71.8	0.4	
Q1707	0.7	-	-	
Q1708	2.9	6.6	2.2	
Q1709	2.2	8.8	1.5	
Q1840	0.6	-	-	



D5 [DYNAMIC FOCUS, QP OUT]

D5 Board



**D5 BOARD
TRANSISTOR VOLTAGE TABLE**

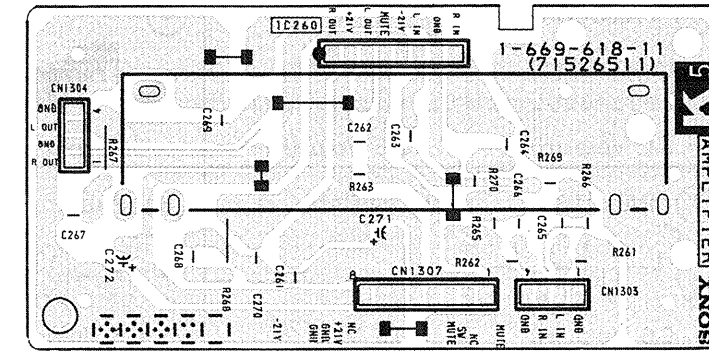
Transistor Voltage Table				
Ref No	(B) Base	(C) Collector	(E) Emitter	
Q2802	0.4	0.1	-	
Q2803	0.1	7.3	-	
Q2805	4.6	-	5.0	
Q2808	0.5	0.2	-	
Q2810	5.3	8.4	5.0	
Q2811	5.0	1.9	5.6	
Q2814	0.2	138	-	

**D5 BOARD
IC VOLTAGE TABLE**

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC2801	1	4.6
	2	6.2
	3	7.5
	4	-
	5	4.6
	6	4.3
	7	2.5
	8	9.0
IC2803	1	5.3
	2	4.4
	3	4.4
	4	-
	5	3.5
	6	3.5
	7	3.5
	8	9.0

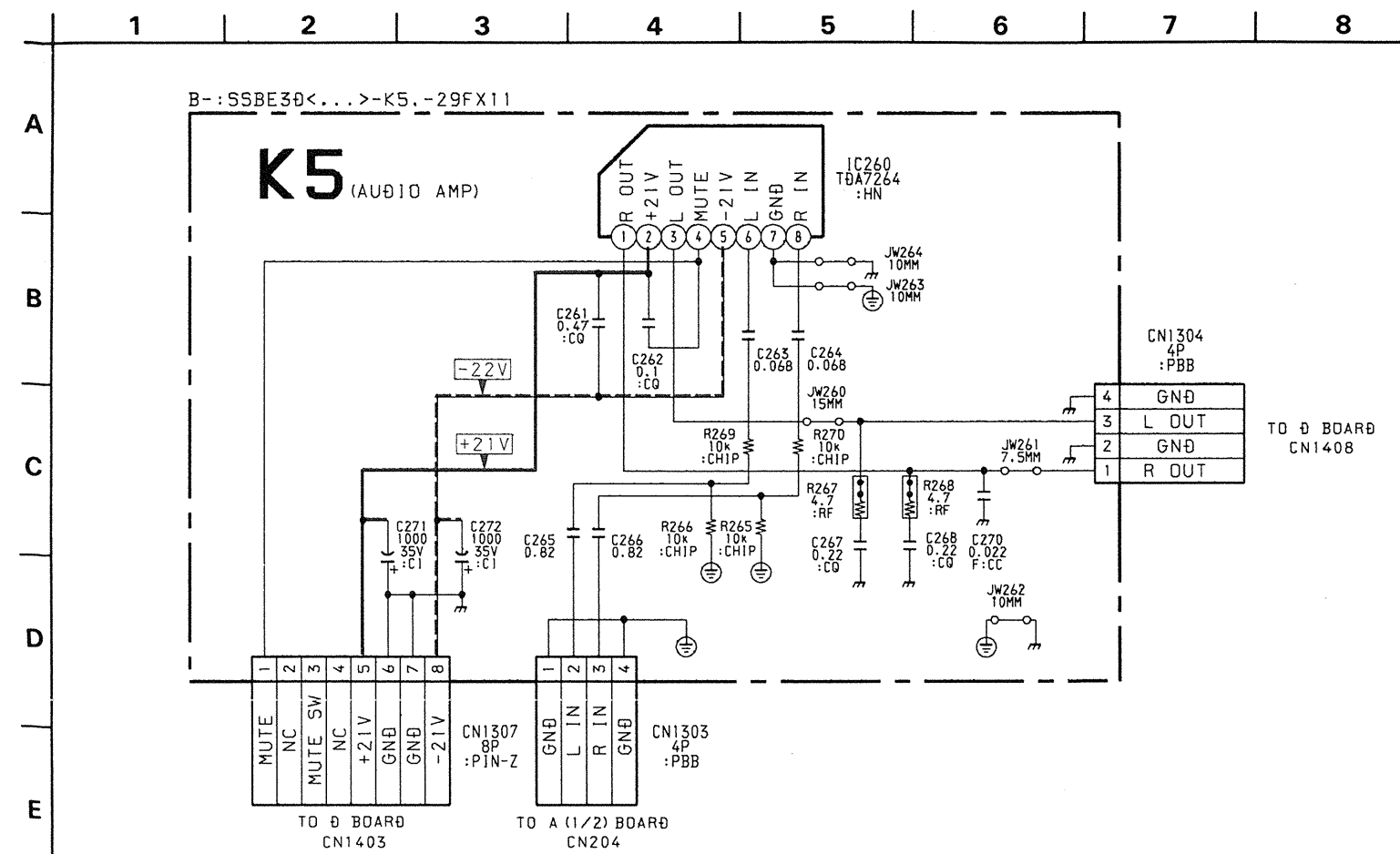
K5 [AUDIO AMP]

K5 Board

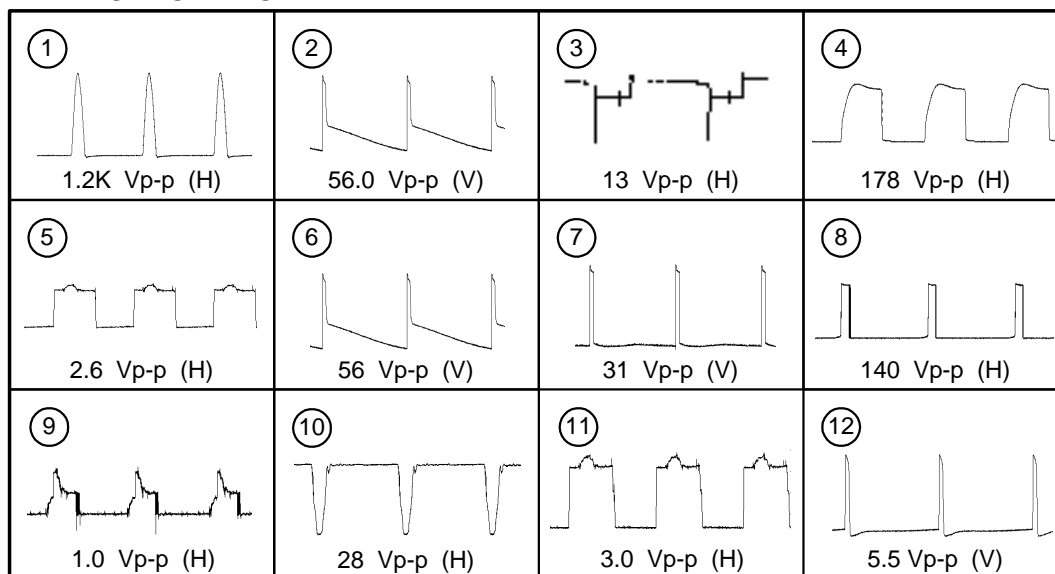


**K5 BOARD
IC VOLTAGE TABLE**

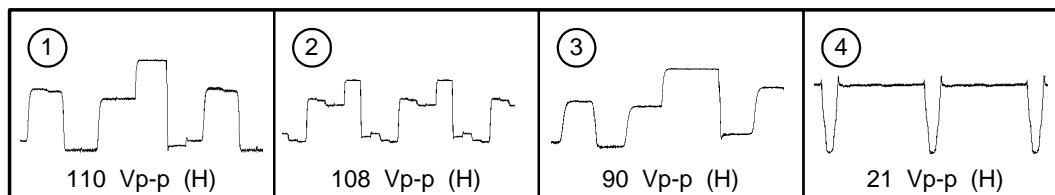
IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC240	1	-
	2	21.7
	3	-
	4	21.7
	5	-21.8
	6	-
	7	-
	8	-



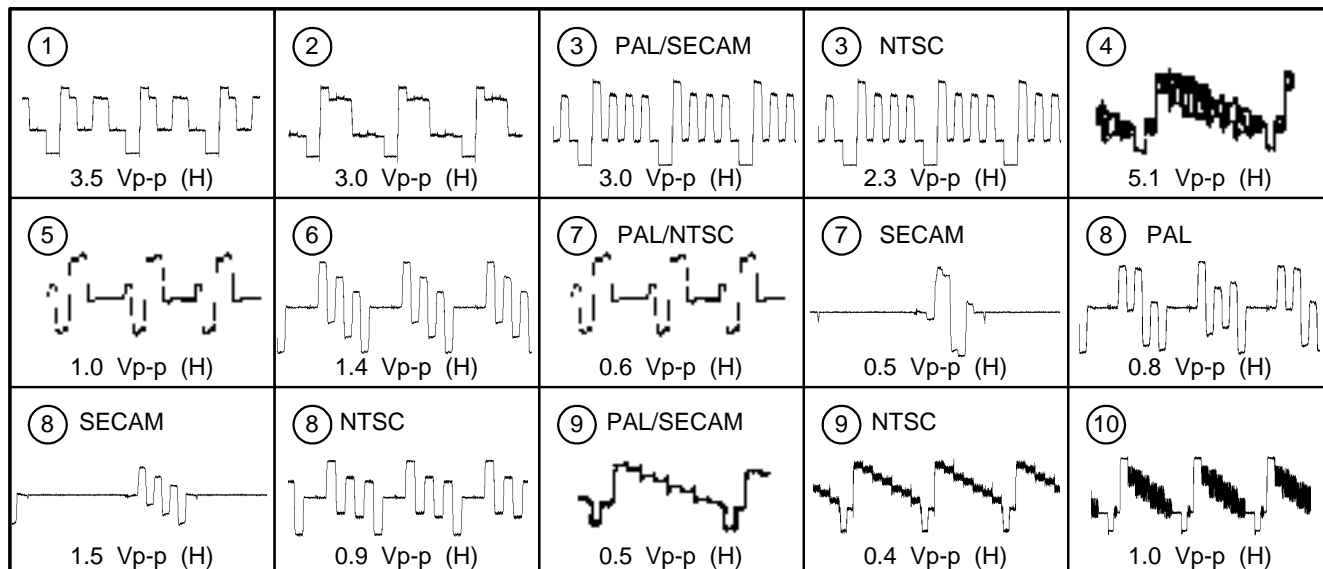
WAVEFORMS D BOARD



WAVEFORMS C BOARD

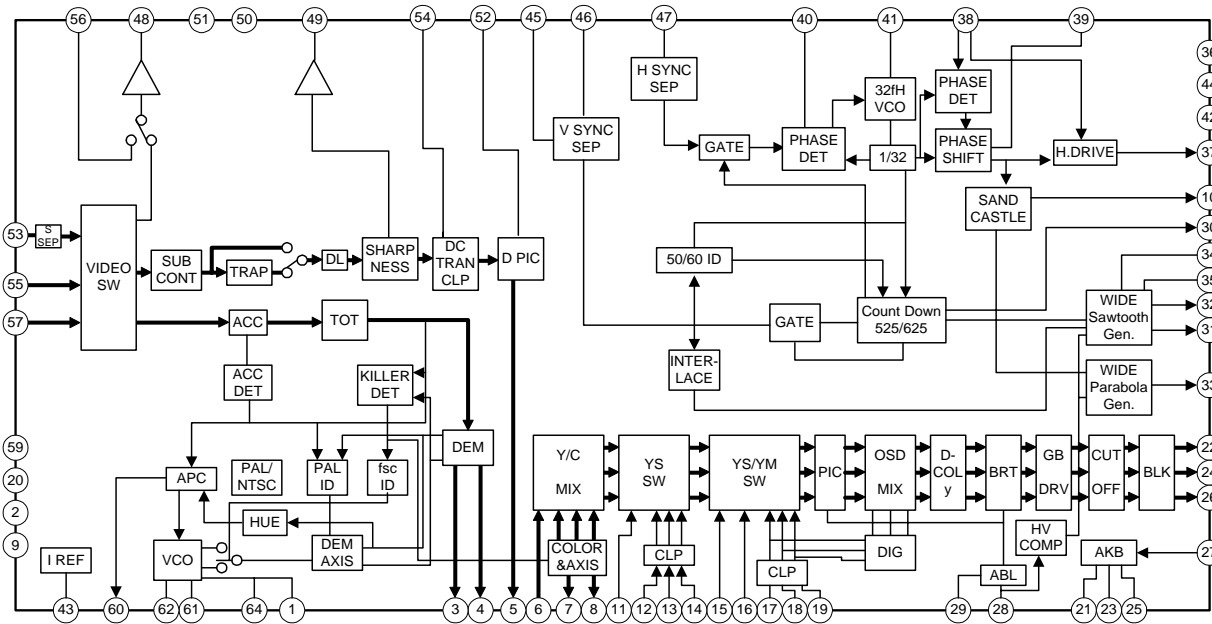


WAVEFORMS A BOARD

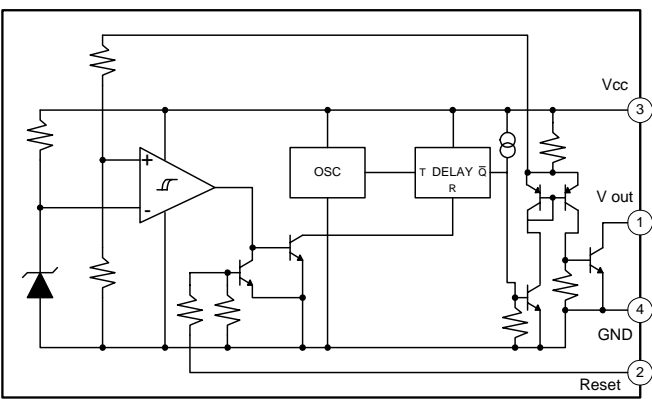


IC BLOCK DIAGRAMS

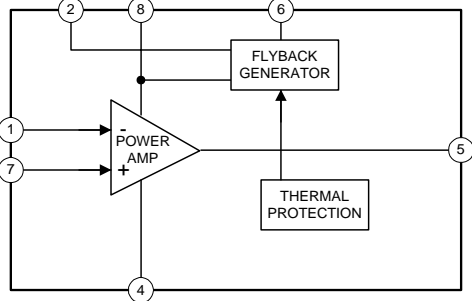
A BOARD IC301 CXA2076Q-TL



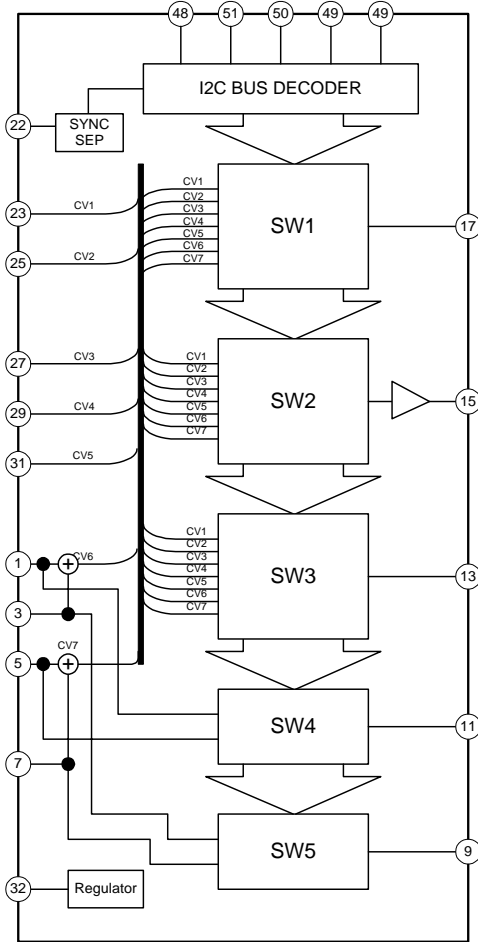
A BOARD IC4 PST593C



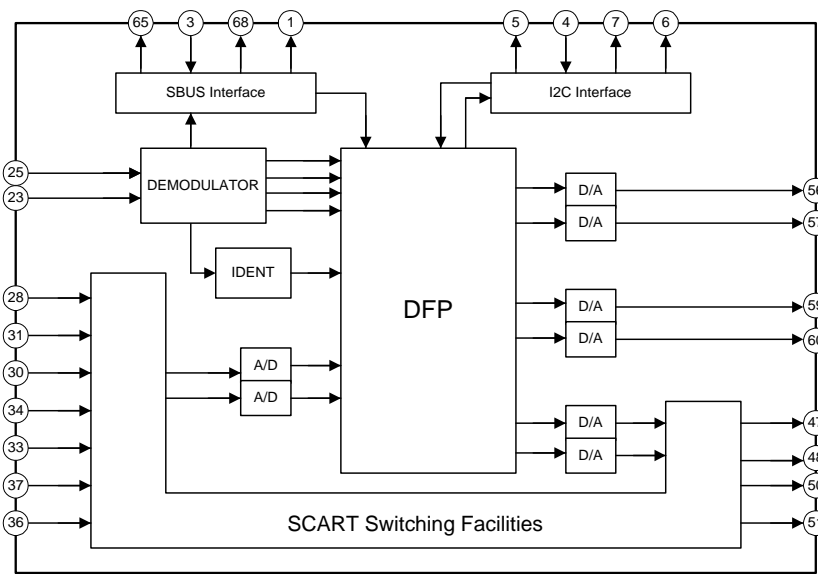
D BOARD IC500 STV9379



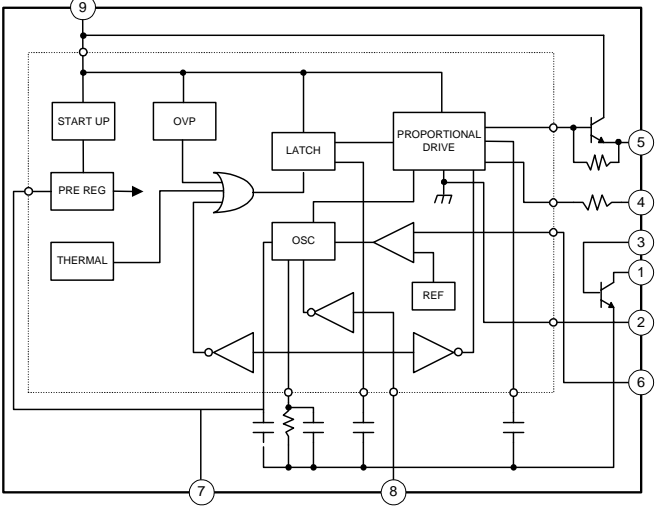
A BOARD IC201 CXA2040AQ



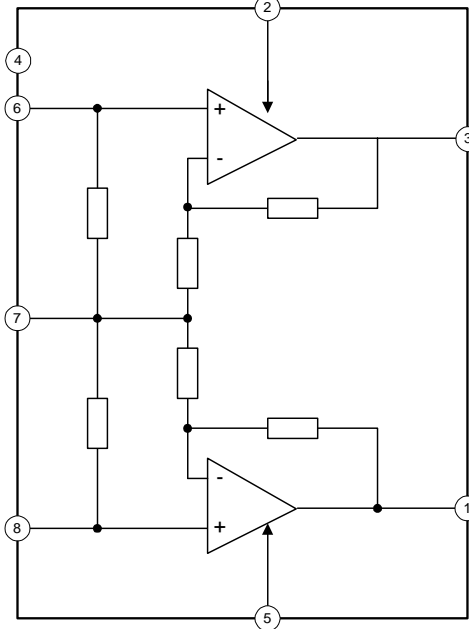
A BOARD IC202 MSP3410D



D BOARD IC600 STR-S6709

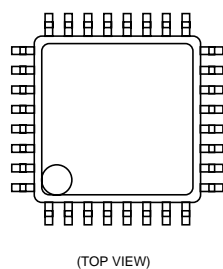


D BOARD IC1200 TDA7264

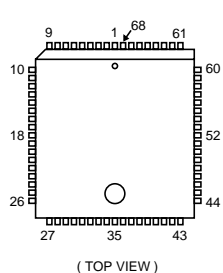


5-4 SEMICONDUCTORS

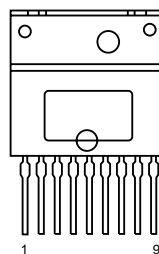
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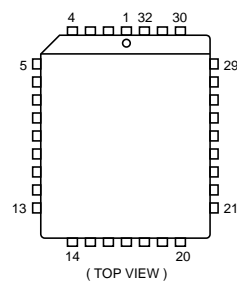
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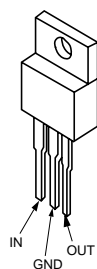
STR-S6709



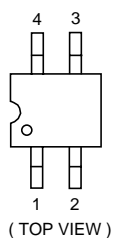
TMS27PC020-15FMBE201



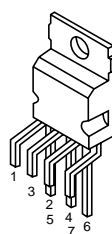
L4941BV
TEA7605



PST593C-MMP-4P



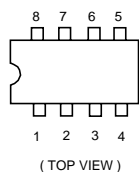
STV9379



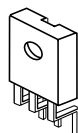
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JA101TP-Q
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2SA933AS
2SA933S
2SA1091-O
2SC3502-E
2SC3601-E
2SC2808STP-R



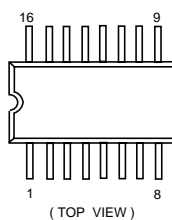
LM393P
M5216P
TDA2822M
 μ PC393C



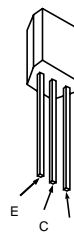
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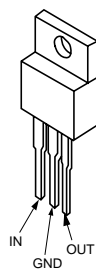
TDA4665T-T



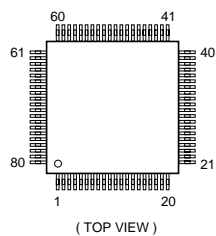
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DTC143TS
DTC144ES
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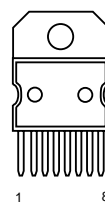
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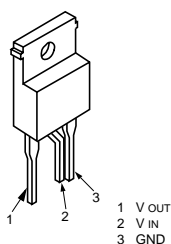
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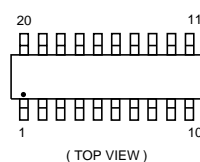
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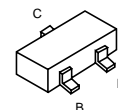
SE135N



TDA8395T



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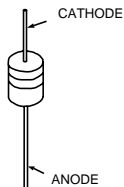
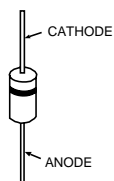
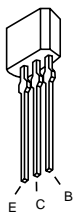
TLP721(D4-)



AU-01Z-V1	FML-G12S
EG-1Z-V1	GP08D
EGP20G	HSS83TD
EL1Z	RGP02
EM1-V1	RGP10GPKG23
ERB44-06TP1	RGP15GPKG23
EU-1-V1	RU3YX-V1
EU2A	RU4AM-T3
EU2-V1	RU4DS

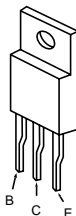
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MTZJ-3.9B	RD5.1ESB2
MTZJ-5.1B	RD5.6ESB2
MTZJ-5.6B	RD6.2ESB2
MTZJ-6.2BMTZJ-6.8C	RD6.8ESB2
MTJ-7.5C	RD7.5ESB2
MTZJ-9.1	RD10ESB2
MTZJ-T-77-9.1A	RD39ES-B2
MTZJ-10	1SS133T-77

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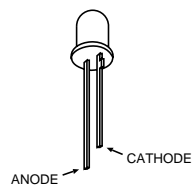
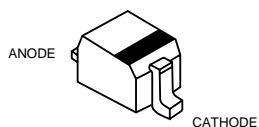


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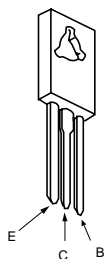
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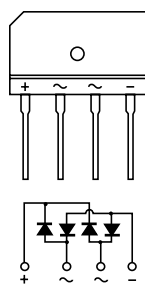
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DTZ9.1	UDZ-TE-17-5.6B
DTZ33B	UDZ-TE-17-9.1B



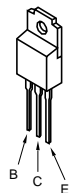
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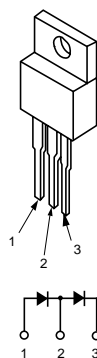
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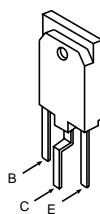
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FMS-3FU



2SC4927-01



SECTION 6 EXPLODED VIEWS

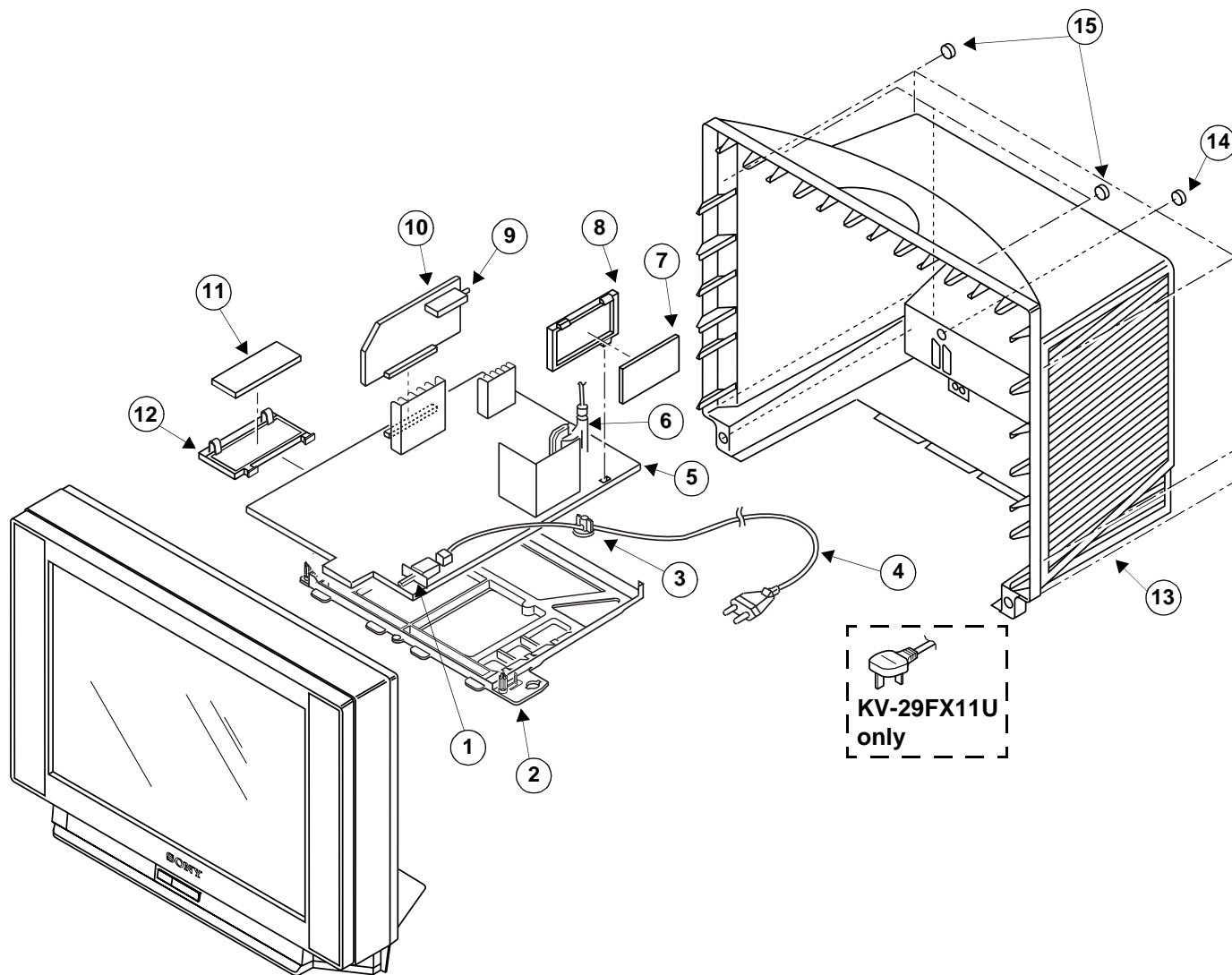
NOTE :

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Note : Les composants identifiés par une trame et par une marque Δ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces du numéro spécifié.

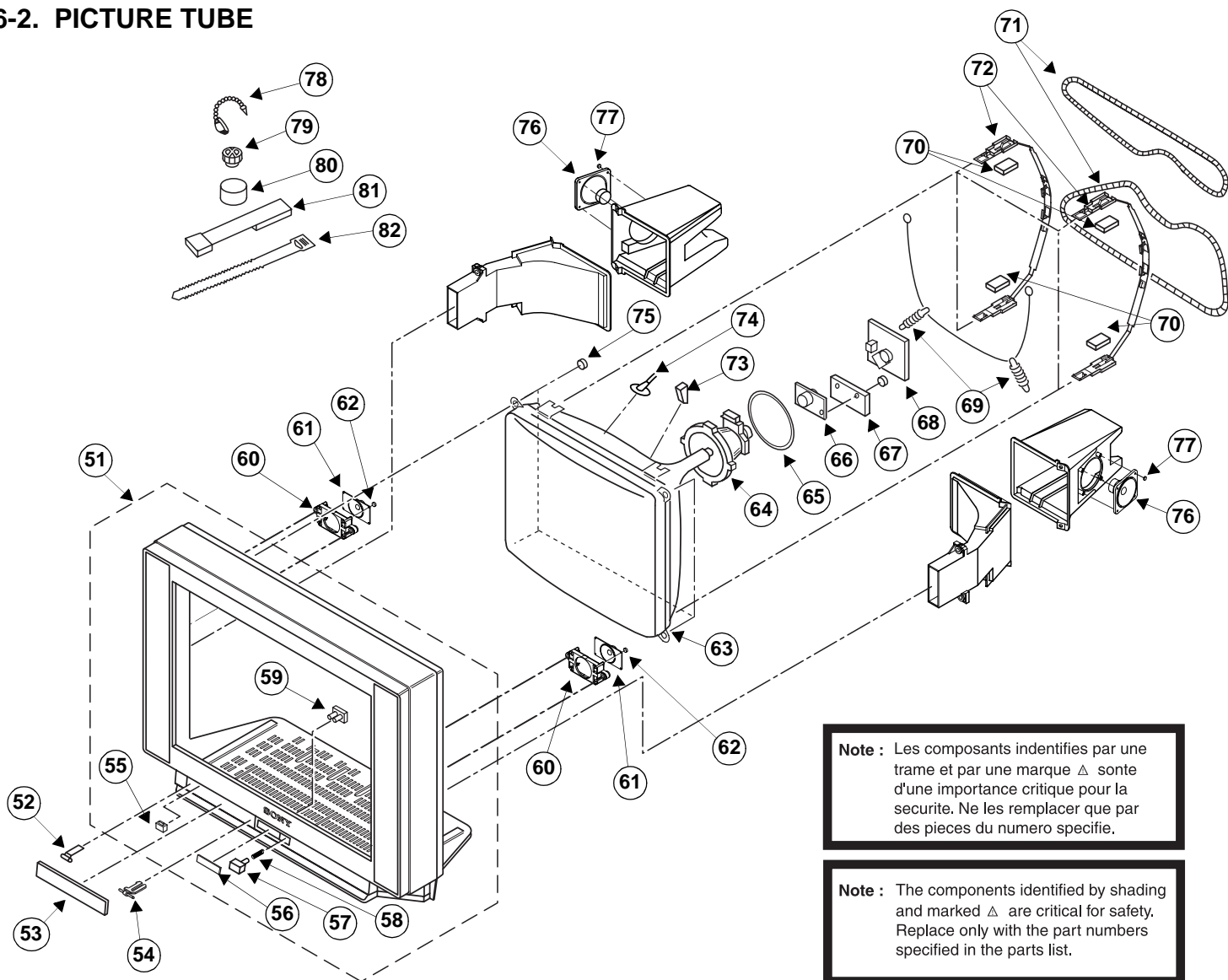
Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

6-1. CHASSIS



REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
1	Δ 1-571-433-21	SWITCH, PUSH (AC POWER)			1-693-340-11	TUNER/VIF (FR) (KV-29FX11B)	
2	*4-203-315-41	BRACKET, MAIN			1-693-339-11	TUNER/VIF (UK) (KV-29FX11U)	
3	*4-202-531-01	AC CORD LOCK (SC)		10	*A-1632-783-A	A BOARD, COMPLETE (KV-29FX11A)	
4	Δ 1-765-286-11	CORD POWER (KV-29FX11A/29FX11B/29FX11D/ KV-29FX11E/29FX11K)			*A-1632-782-A	A BOARD, COMPLETE (KV-29FX11B)	
	Δ 1-574-062-61	CORD POWER (WITH CONNECTOR) (KV-29FX11R)			*A-1632-769-A	A BOARD, COMPLETE (KV-29FX11D)	
	Δ 1-776-204-11	CORD POWER (FILTER) (KV-29FX11U)			*A-1632-784-A	A BOARD, COMPLETE (KV-29FX11E)	
5	*A-1642-232-A	D BOARD, COMPLETE			*A-1632-785-A	A BOARD, COMPLETE (KV-29FX11K)	
6	Δ 1-453-269-11	TRANSFORMER ASSY, FLYBACK (NA-4511/U2B4)			*A-1632-786-A	A BOARD, COMPLETE (KV-29FX11R)	
7	*A-1640-307-A	D5 BOARD, COMPLETE			*A-1632-781-A	A BOARD, COMPLETE (KV-29FX11U)	
8	*4-204-206-01	BRACKET, D5		11	*A-1649-022-A	K5 BOARD, COMPLETE	
9	1-693-338-11	TUNER/VIF (AEP) (KV-29FX11A/29FX11D/29FX11E/29FX11K/ KV-29FX11R)		12	*4-204-189-01	BRACKET, K5	
				13	4-204-188-01	COVER, REAR	
				14	7-685-904-21	SCREW +PTPHW 4X10 TYPE 2	
				15	4-039-358-01	SCREW (4X16), (+)BV TAPPING	

6-2. PICTURE TUBE



REF.NO.	PART.NO	DESCRIPTION	REMARK
51	X-4200-386-1	BEZNET ASSY	55-59
52	4-045-250-01	DAMPER	
53	4-204-190-11	DOOR (KV-29FX11A/29FX11D/29FX11R)	
	4-204-190-01	DOOR (KV-29FX11B/29FX11E/29FX11K/29FX11U)	
54	4-202-555-01	SHAFT DOOR	
55	4-042-192-11	CATCHER, PUSH	
56	4-204-195-01	WINDOW ORNAMENTAL	
57	4-204-194-01	BUTTON, POWER	
58	4-202-964-11	SPRING	
59	4-204-196-01	GUIDE LIGHT	
60	4-204-201-01	BRACKET, SPEAKER	
61	1-505-952-11	SPEAKER	
62	4-039-356-01	SCREW (3X12), (+) BV TAPPING	
63	Δ 8-735-041-05	PICTURE TUBE	
64	Δ 8-451-494-21	DEFLECTION YOKE (Y29RSA-M2)	
65	1-452-896-11	COIL, NA ROTATION (RT200) 66	

REF.NO.	PART.NO	DESCRIPTION	REMARK
66	Δ 8-453-011-11	NECK ASSY, NA299-M	
67	*A-1644-091-A	VM BOARD, COMPLETE	
68	*A-1638-113-A	C BOARD, COMPLETE	
69	4-200-433-01	SPRING, EXTENSION	
70	4-052-452-01	CUSHION DGC	
71	Δ 1-406-807-11	COIL, DEMAGNETIZATION	
72	4-060-802-01	HOLDER, DGC	
73	3-704-495-01	SPACER, DY	
74	Δ 1-251-528-21	CAP ASSY, HIGH VOLTAGE	
75	4-302-404-03	SCREW (WASHER HEAD) (+P4x16)	
76	1-505-937-11	SPEAKER (10CM)	
77	4-039-358-01	SCREW (4x16), (+) BV TAPPING	
78	4-308-870-00	CLIP, LEAD WIRE	
79	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
80	1-425-032-00	MAGNET, DISK; 10MM Ø	
81	X-4387-214-1	PERMALLOY ASSY, CORRECTION	
82	3-701-007-00	BAND, BINDING	

SECTION 7 ELECTRICAL PARTS LIST

Note : Les composants identifiés par une trame et par une marque Δ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces du numéro spécifié.

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- **RESISTORS**
- All resistors are in ohms.
- F : nonflammable.

When indicating parts by reference number, please include the board name.

CAPACITORS
MF : mF, PF : mmF

COILS
MMH : mH , uH

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REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
	*A-1632-783-A	A BOARD, COMPLETE *****	(KV-29FX11A)	C103	1-126-965-11	ELECT 22MF	20% 50V
	*A-1632-782-A	A BOARD, COMPLETE *****	(KV-29FX11B)	C104	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
	*A-1632-769-A	A BOARD, COMPLETE *****	(KV-29FX11D)	C110	1-126-967-11	ELECT 47MF	20% 16V
	*A-1632-784-A	A BOARD, COMPLETE *****	(KV-29FX11E)	C112	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
	*A-1632-785-A	A BOARD, COMPLETE *****	(KV-29FX11K)	C113	1-126-967-11	ELECT 47MF	20% 16V
	*A-1632-786-A	A BOARD, COMPLETE *****	(KV-29FX11R)	C120	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
	*A-1632-781-A	A BOARD, COMPLETE *****	(KV-29FX11U)	C121	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
	1-750-797-11	SOCKET, PLCC		C122	1-163-137-00	CERAMIC CHIP 680PF	5% 50V
	< CAPACITOR >			C123	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
C1	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C124	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2	1-126-967-11	ELECT 47MF	20% 16V	C125	1-163-141-91	CERAMIC CHIP 1000PF	5% 50V
C3	1-163-104-00	CERAMIC CHIP 30PF	5% 50V	C144	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C4	1-163-104-00	CERAMIC CHIP 30PF	5% 50V	C201	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C202	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C14	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C203	1-104-661-91	ELECT 330MF	20% 16V
C15	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C204	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C18	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C205	1-126-965-11	ELECT 22MF	20% 50V
C19	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	C207	1-126-964-11	ELECT 10MF	20% 50V
C20	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C208	1-126-964-11	ELECT 10MF	20% 50V
C21	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C209	1-126-964-11	ELECT 10MF	20% 50V
C22	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C210	1-216-295-00	SHORT 0	
C24	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C211	1-126-964-11	ELECT 10MF	20% 50V
C45	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C212	1-164-346-11	CERAMIC CHIP 1MF	16V
C80	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C213	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C81	1-126-959-11	ELECT 0.47MF	20% 50V	C214	1-164-346-11	CERAMIC CHIP 1MF	16V
C82	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V	C215	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C90	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C216	1-126-967-11	ELECT 47MF	20% 16V
C101	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C217	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C102	1-126-934-11	ELECT 220MF	20% 16V	C218	1-126-967-11	ELECT 47MF	20% 16V
				C219	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
				C220	1-126-964-11	ELECT 10MF	20% 50V
				C221	1-164-505-11	CERAMIC CHIP 2.2MF	16V
				C222	1-164-346-11	CERAMIC CHIP 1MF	16V
				C223	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
				C224	1-164-346-11	CERAMIC CHIP 1MF	16V

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REF. NO.	PART.NO	DESCRIPTION	REMARK	REF. NO.	PART.NO	DESCRIPTION	REMARK
C225	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	C300	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
C226	1-126-967-11	ELECT 47MF	20% 16V	C301	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C227	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C302	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C228	1-126-967-11	ELECT 47MF	20% 16V	C303	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C229	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C304	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C230	1-216-295-00	SHORT 0		C305	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C233	1-126-967-11	ELECT 47MF	20% 16V	C306	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C238	1-126-967-11	ELECT 47MF	20% 16V	C307	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C239	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C308	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C242	1-164-489-91	CERAMIC CHIP 0.22MF	10% 16V	C309	1-164-346-11	CERAMIC CHIP 1MF	16V
C243	1-164-489-91	CERAMIC CHIP 0.22MF	10% 16V	C310	1-164-346-11	CERAMIC CHIP 1MF	16V
C251	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V	C311	1-164-346-11	CERAMIC CHIP 1MF	16V
C252	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V	C312	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C253	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C313	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C254	1-163-109-00	CERAMIC CHIP 47PF	5% 50V	C315	1-216-295-00	SHORT 0	
C255	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C317	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C256	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C319	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C257	1-126-965-11	ELECT 22MF	20% 50V	C320	1-126-965-11	ELECT 22MF	20% 50V
C258	1-126-964-11	ELECT 10MF	20% 50V	C321	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C259	1-164-336-11	CERAMIC CHIP 0.33MF	25V	C322	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C260	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C323	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C261	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	C324	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C262	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	C325	1-164-346-11	CERAMIC CHIP 1MF	16V
C263	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C326	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C264	1-126-962-11	ELECT 3.3MF	20% 50V	C327	1-136-167-91	FILM 0.15MF	5% 50V
C265	1-126-964-11	ELECT 10MF	20% 50V	C328	1-126-965-11	ELECT 22MF	20% 50V
C266	1-126-964-11	ELECT 10MF	20% 50V	C332	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C267	1-126-965-11	ELECT 22MF	20% 50V	C333	1-126-933-11	ELECT 100MF	20% 16V
C268	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C334	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C269	1-163-131-00	CERAMIC CHIP 390PF	5% 50V	C335	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C270	1-163-131-00	CERAMIC CHIP 390PF	5% 50V	C336	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C271	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C337	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C272	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C338	1-164-346-11	CERAMIC CHIP 1MF	16V
C273	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C339	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C274	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C340	1-126-933-11	ELECT 100MF	20% 16V
C275	1-164-346-11	CERAMIC CHIP 1MF	16V	C341	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C276	1-164-346-11	CERAMIC CHIP 1MF	16V	C342	1-164-346-11	CERAMIC CHIP 1MF	16V
C277	1-164-346-11	CERAMIC CHIP 1MF	16V	C343	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C278	1-164-346-11	CERAMIC CHIP 1MF	16V	C344	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C279	1-126-965-11	ELECT 22MF	20% 50V	C347	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C280	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C348	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C281	1-126-965-11	ELECT 22MF	20% 50V	C350	1-126-964-11	ELECT 10MF	20% 50V
C282	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C351	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C283	1-163-123-00	CERAMIC CHIP 180PF	5% 50V	C352	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C284	1-163-123-00	CERAMIC CHIP 180PF	5% 50V	C353	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C285	1-163-035-91	CERAMIC CHIP 4700PF	5% 50V	C354	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C286	1-163-035-91	CERAMIC CHIP 4700PF	5% 50V	C355	1-126-965-11	ELECT 22MF	20% 50V

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
C356	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D220	8-719-988-62	DIODE 1SS355	
C357	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	D221	8-719-988-62	DIODE 1SS355	
C358	1-164-005-11	CERAMIC CHIP 0.47MF	25V	D222	8-719-977-22	DIODE DT29.1	
C359	1-163-231-11	CERAMIC CHIP 15PF	5% 50V	D223	8-719-977-22	DIODE DT29.1	
C360	1-163-231-11	CERAMIC CHIP 15PF	5% 50V	D224	8-719-977-22	DIODE DT29.1	
C370	1-164-505-11	CERAMIC CHIP 2.2MF	16V	D225	8-719-977-22	DIODE DT29.1	
C371	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	D226	8-719-977-22	DIODE DT29.1	
C372	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D227	8-719-977-13	DIODE DT26.8C	
C373	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V	D251	8-719-047-16	DIODE BAS216	
C1001	1-163-235-11	CERAMIC CHIP 22PF	5% 50V	D320	8-719-977-22	DIODE DT29.1	
C1002	1-163-235-11	CERAMIC CHIP 22PF	5% 50V	D370	8-719-047-16	DIODE BAS216	
C1010	1-163-038-00	CERAMIC CHIP 0.1MF	25V	D1010	8-719-036-58	DIODE MA3030-H(TX)	
C1013	1-126-965-11	ELECT 22MF	20% 50V	< ENCAPSULATED FILTER >			
C1014	1-163-038-00	CERAMIC CHIP 0.1MF	25V	FL101	1-236-071-11	ENCAPSULATED COMPONENT	
C1015	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V	FL201	1-236-071-11	ENCAPSULATED COMPONENT	
C1020	1-163-101-00	CERAMIC CHIP 22PF	5% 50V	FL202	1-236-071-11	ENCAPSULATED COMPONENT	
< FILTER >				FL203	1-236-071-11	ENCAPSULATED COMPONENT	
CF120	1-409-327-00	TRAP, CERAMIC (6.5MHZ)		FL1001	1-236-071-11	ENCAPSULATED COMPONENT	
< CONNECTOR >				< IC >			
CN1	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P		IC1	8-759-376-77	IC SDA30C263-GEG	
CN2	*1-564-508-11	PLUG, CONNECTOR 5P		IC2	8-759-524-94	IC M24C32-MW6T	
CN201	1-766-296-11	CONNECTOR, DUAL SCART		IC4	8-759-394-57	IC PST593C-MMP-4P	
CN204	*1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P		IC201	8-752-081-26	IC CXA2040AQ-T4	
CN301	*1-568-882-51	PIN, CONNECTOR 7P		IC202	8-759-491-94	IC MSP3410D-PS-B4-T	
< DIODE >				IC205	8-759-394-57	IC PST593C-MMP-4P	
D2	8-719-988-62	DIODE 1SS355		IC301	8-752-081-43	IC CXA2076Q-TL	
D16	8-719-988-62	DIODE 1SS355		IC302	8-759-288-85	IC TDA4665T-T	
D101	8-719-977-81	DIODE DT233B		IC303	8-759-430-79	IC TDA8395T/N3	
D201	8-719-977-22	DIODE DT29.1		IC1001	8-759-376-76	IC SDA5273CP-GEG	
D202	8-719-977-22	DIODE DT29.1		< COIL >			
D203	8-719-977-22	DIODE DT29.1		L102	1-410-506-11	INDUCTOR 5.6UH	
D204	8-719-977-22	DIODE DT29.1		L111	1-410-993-11	INDUCTOR CHIP 1UH	
D206	8-719-977-22	DIODE DT29.1		L120	1-408-602-31	INDUCTOR 8.2UH	
D207	8-719-977-22	DIODE DT29.1		L121	1-408-591-11	INDUCTOR 1UH	
D208	8-719-977-22	DIODE DT29.1		L122	1-408-602-31	INDUCTOR 8.2UH	
D209	8-719-977-22	DIODE DT29.1		L300	1-408-607-31	INDUCTOR 22UH	
D210	8-719-977-22	DIODE DT29.1		< TRANSISTOR >			
D211	8-719-977-22	DIODE DT29.1		Q1	8-729-620-06	TRANSISTOR 2SC3052-EF	
D212	8-719-977-22	DIODE DT29.1		Q4	8-729-620-06	TRANSISTOR 2SC3052-EF	
D214	8-719-977-22	DIODE DT29.1		Q15	8-729-216-22	TRANSISTOR 2SA1162-G	
D215	8-719-977-22	DIODE DT29.1		Q80	8-729-620-06	TRANSISTOR 2SC3052-EF	
D216	8-719-158-15	DIODE RD5.6S-B		Q81	8-729-216-22	TRANSISTOR 2SA1162-G	
D217	8-719-158-15	DIODE RD5.6S-B		Q110	8-729-620-06	TRANSISTOR 2SC3052-EF	
D218	8-719-158-15	DIODE RD5.6S-B					

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REF. NO.	PART.NO	DESCRIPTION	REMARK	REF. NO.	PART.NO	DESCRIPTION	REMARK
Q111	8-729-216-22	TRANSISTOR 2SA1162-G		R20	1-216-025-00	RES,CHIP 100 5%	1/10W
Q112	8-729-620-06	TRANSISTOR 2SC3052-EF		R21	1-216-025-00	RES,CHIP 100 5%	1/10W
Q120	8-729-620-06	TRANSISTOR 2SC3052-EF		R23	1-216-041-00	RES,CHIP 470 5%	1/10W
Q121	8-729-620-06	TRANSISTOR 2SC3052-EF		R24	1-216-065-00	RES,CHIP 4.7K 5%	1/10W
Q122	8-729-620-06	TRANSISTOR 2SC3052-EF		R25	1-216-065-00	RES,CHIP 4.7K 5%	1/10W
Q124	8-729-620-06	TRANSISTOR 2SC3052-EF		R28	1-216-065-00	RES,CHIP 4.7K 5%	1/10W
Q130	8-729-216-22	TRANSISTOR 2SA1162-G		R29	1-216-065-00	RES,CHIP 4.7K 5%	1/10W
Q140	8-729-620-06	TRANSISTOR 2SC3052-EF		R30	1-216-065-00	RES,CHIP 4.7K 5%	1/10W
Q141	8-729-216-22	TRANSISTOR 2SA1162-G		R31	1-216-065-00	RES,CHIP 4.7K 5%	1/10W
Q201	8-729-620-06	TRANSISTOR 2SC3052-EF		R32	1-216-025-00	RES,CHIP 100 5%	1/10W
Q202	8-729-620-06	TRANSISTOR 2SC3052-EF		R33	1-216-025-00	RES,CHIP 100 5%	1/10W
Q203	8-729-620-06	TRANSISTOR 2SC3052-EF		R34	1-216-025-00	RES,CHIP 100 5%	1/10W
Q204	8-729-620-06	TRANSISTOR 2SC3052-EF		R35	1-216-025-00	RES,CHIP 100 5%	1/10W
Q300	1-801-806-11	TRANSISTOR DTC144EKA		R39	1-216-073-00	RES,CHIP 10K 5%	1/10W
Q304	8-729-620-06	TRANSISTOR 2SC3052-EF		R46	1-216-095-00	RES,CHIP 82K 5%	1/10W
Q305	8-729-620-06	TRANSISTOR 2SC3052-EF		R48	1-216-121-91	RES,CHIP 1M 5%	1/10W
Q306	1-801-806-11	TRANSISTOR DTC144EKA		R49	1-216-025-00	RES,CHIP 100 5%	1/10W
Q330	8-729-216-22	TRANSISTOR 2SA1162-G		R50	1-216-065-00	RES,CHIP 4.7K 5%	1/10W
Q331	8-729-620-06	TRANSISTOR 2SC3052-EF		R51	1-216-059-00	RES,CHIP 2.7K 5%	1/10W
Q332	8-729-620-06	TRANSISTOR 2SC3052-EF		R54	1-216-025-00	RES,CHIP 100 5%	1/10W
Q333	8-729-216-22	TRANSISTOR 2SA1162-G		R59	1-216-025-00	RES,CHIP 100 5%	1/10W
Q334	8-729-216-22	TRANSISTOR 2SA1162-G		R60	1-216-025-00	RES,CHIP 100 5%	1/10W
Q335	8-729-216-22	TRANSISTOR 2SA1162-G		R61	1-216-025-00	RES,CHIP 100 5%	1/10W
Q1001	1-801-806-11	TRANSISTOR DTC144EKA		R62	1-216-025-00	RES,CHIP 100 5%	1/10W
Q1002	8-729-216-22	TRANSISTOR 2SA1162-G		R63	1-216-025-00	RES,CHIP 100 5%	1/10W
Q1003	1-801-806-11	TRANSISTOR DTC144EKA		R64	1-216-025-00	RES,CHIP 100 5%	1/10W
Q1005	8-729-101-07	TRANSISTOR 2SB798-DL		R65	1-216-025-00	RES,CHIP 100 5%	1/10W
< RESISTOR >				R66	1-216-057-00	RES,CHIP 2.2K 5%	1/10W
JR7	1-216-295-00	SHORT 0		R67	1-216-057-00	RES,CHIP 2.2K 5%	1/10W
JR101	1-216-295-00	SHORT 0		R68	1-216-025-00	RES,CHIP 100 5%	1/10W
JR102	1-216-295-00	SHORT 0		R70	1-216-025-00	RES,CHIP 100 5%	1/10W
JR201	1-216-295-00	SHORT 0		R71	1-216-025-00	RES,CHIP 100 5%	1/10W
JR204	1-216-295-00	SHORT 0		R72	1-216-025-00	RES,CHIP 100 5%	1/10W
JR205	1-216-295-00	SHORT 0		R73	1-216-025-00	RES,CHIP 100 5%	1/10W
JR207	1-216-295-00	SHORT 0		R74	1-216-025-00	RES,CHIP 100 5%	1/10W
JR208	1-216-295-00	SHORT 0		R75	1-216-025-00	RES,CHIP 100 5%	1/10W
JR209	1-216-295-00	SHORT 0		R76	1-216-025-00	RES,CHIP 100 5%	1/10W
JR391	1-216-295-00	SHORT 0		R77	1-216-025-00	RES,CHIP 100 5%	1/10W
R1	1-216-049-00	RES,CHIP 1K 5%	1/10W	R78	1-414-233-21	INDUCTOR CHIP 00H	
R2	1-216-025-00	RES,CHIP 100 5%	1/10W	R79	1-216-033-00	RES,CHIP 220 5%	1/10W
R3	1-216-025-00	RES,CHIP 100 5%	1/10W	R80	1-216-049-00	RES,CHIP 1K 5%	1/10W
R4	1-216-013-00	RES,CHIP 33 5%	1/10W	R81	1-216-081-00	RES,CHIP 22K 5%	1/10W
R5	1-216-065-00	RES,CHIP 4.7K 5%	1/10W	R82	1-216-065-00	RES,CHIP 4.7K 5%	1/10W
R7	1-216-041-00	RES,CHIP 470 5%	1/10W	R83	1-216-073-00	RES,CHIP 10K 5%	1/10W
R9	1-216-041-00	RES,CHIP 470 5%	1/10W	R84	1-216-081-00	RES,CHIP 22K 5%	1/10W
R19	1-216-025-00	RES,CHIP 100 5%	1/10W	R85	1-216-073-00	RES,CHIP 10K 5%	1/10W
				R86	1-216-077-00	RES,CHIP 15K 5%	1/10W

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
R87	1-216-081-00	RES,CHIP	22K 5% 1/10W	R151	1-216-025-71	RES,CHIP	100 5% 1/10W
R88	1-216-025-00	RES,CHIP	100 5% 1/10W	R200	1-216-049-00	RES,CHIP	1K 5% 1/10W
R91	1-216-025-00	RES,CHIP	100 5% 1/10W	R201	1-216-033-00	RES,CHIP	220 5% 1/10W
R92	1-216-025-00	RES,CHIP	100 5% 1/10W	R202	1-216-033-00	RES,CHIP	220 5% 1/10W
R93	1-216-033-00	RES,CHIP	220 5% 1/10W	R203	1-216-025-00	RES,CHIP	100 5% 1/10W
R94	1-216-033-00	RES,CHIP	220 5% 1/10W	R204	1-216-025-00	RES,CHIP	100 5% 1/10W
R95	1-216-033-00	RES,CHIP	220 5% 1/10W	R205	1-216-083-91	RES,CHIP	27K 5% 1/10W
R101	1-216-061-00	RES,CHIP	3.3K 5% 1/10W	R206	1-216-033-00	RES,CHIP	220 5% 1/10W
R102	1-216-025-00	RES,CHIP	100 5% 1/10W	R208	1-216-041-00	RES,CHIP	470 5% 1/10W
R103	1-216-025-00	RES,CHIP	100 5% 1/10W	R209	1-216-035-00	RES,CHIP	270 5% 1/10W
R104	1-216-073-00	RES,CHIP	10K 5% 1/10W	R210	1-216-013-00	RES,CHIP	33 5% 1/10W
R105	1-216-113-00	RES,CHIP	470K 5% 1/10W	R211	1-216-033-00	RES,CHIP	220 5% 1/10W
R106	1-216-073-00	RES,CHIP	10K 5% 1/10W	R212	1-216-022-00	RES,CHIP	75 5% 1/10W
R107	1-216-295-00	SHORT	0	R213	1-216-022-00	RES,CHIP	75 5% 1/10W
R110	1-216-073-00	RES,CHIP	10K 5% 1/10W	R214	1-216-025-00	RES,CHIP	100 5% 1/10W
R111	1-216-029-00	RES,CHIP	150 5% 1/10W	R216	1-216-025-00	RES,CHIP	100 5% 1/10W
R112	1-216-029-00	RES,CHIP	150 5% 1/10W	R217	1-216-113-00	RES,CHIP	470K 5% 1/10W
R113	1-216-001-00	RES,CHIP	10 5% 1/10W	R218	1-216-025-00	RES,CHIP	100 5% 1/10W
R114	1-216-029-00	RES,CHIP	150 5% 1/10W	R219	1-216-113-00	RES,CHIP	470K 5% 1/10W
R115	1-216-037-00	RES,CHIP	330 5% 1/10W	R220	1-216-295-00	SHORT	0
R119	1-216-295-00	SHORT	0	R221	1-216-039-00	RES,CHIP	390 5% 1/10W
R120	1-216-069-00	RES,CHIP	6.8K 5% 1/10W	R222	1-216-089-00	RES,CHIP	47K 5% 1/10W
R121	1-216-073-00	RES,CHIP	10K 5% 1/10W	R223	1-216-295-00	SHORT	0
R122	1-216-041-00	RES,CHIP	470 5% 1/10W	R224	1-216-039-00	RES,CHIP	390 5% 1/10W
R123	1-216-031-00	RES,CHIP	180 5% 1/10W	R225	1-216-089-00	RES,CHIP	47K 5% 1/10W
R124	1-216-049-00	RES,CHIP	1K 5% 1/10W	R226	1-216-033-00	RES,CHIP	220 5% 1/10W
R125	1-216-081-00	RES,CHIP	22K 5% 1/10W	R227	1-216-022-00	RES,CHIP	75 5% 1/10W
R126	1-216-025-00	RES,CHIP	100 5% 1/10W	R228	1-216-022-00	RES,CHIP	75 5% 1/10W
R127	1-216-081-00	RES,CHIP	22K 5% 1/10W	R229	1-216-033-00	RES,CHIP	220 5% 1/10W
R128	1-216-035-00	RES,CHIP	270 5% 1/10W	R230	1-216-022-00	RES,CHIP	75 5% 1/10W
R129	1-216-037-00	RES,CHIP	330 5% 1/10W	R232	1-216-025-00	RES,CHIP	100 5% 1/10W
R130	1-216-061-00	RES,CHIP	3.3K 5% 1/10W	R233	1-216-025-00	RES,CHIP	100 5% 1/10W
R131	1-216-073-00	RES,CHIP	10K 5% 1/10W	R234	1-216-113-00	RES,CHIP	470K 5% 1/10W
R132	1-216-025-00	RES,CHIP	100 5% 1/10W	R235	1-216-025-00	RES,CHIP	100 5% 1/10W
R133	1-216-041-00	RES,CHIP	470 5% 1/10W	R236	1-216-113-00	RES,CHIP	470K 5% 1/10W
R134	1-216-001-00	RES,CHIP	10 5% 1/10W	R237	1-216-295-00	SHORT	0
R135	1-216-037-00	RES,CHIP	330 5% 1/10W	R238	1-216-089-00	RES,CHIP	47K 5% 1/10W
R136	1-216-033-00	RES,CHIP	220 5% 1/10W	R239	1-216-039-00	RES,CHIP	390 5% 1/10W
R137	1-216-049-00	RES,CHIP	1K 5% 1/10W	R240	1-216-295-00	SHORT	0
R138	1-216-041-00	RES,CHIP	470 5% 1/10W	R241	1-216-089-00	RES,CHIP	47K 5% 1/10W
R144	1-216-081-00	RES,CHIP	22K 5% 1/10W	R242	1-216-039-00	RES,CHIP	390 5% 1/10W
R145	1-216-049-00	RES,CHIP	1K 5% 1/10W	R243	1-216-033-00	RES,CHIP	220 5% 1/10W
R146	1-216-049-00	RES,CHIP	1K 5% 1/10W	R244	1-216-033-00	RES,CHIP	220 5% 1/10W
R147	1-216-033-00	RES,CHIP	220 5% 1/10W	R248	1-216-073-71	RES,CHIP	10K 5% 1/10W
R148	1-216-051-00	RES,CHIP	1.2K 5% 1/10W	R249	1-216-001-00	RES,CHIP	10 5% 1/10W
R149	1-216-049-00	RES,CHIP	1K 5% 1/10W	R250	1-216-073-71	RES,CHIP	10K 5% 1/10W
R150	1-216-061-00	RES,CHIP	3.3K 5% 1/10W	R255	1-216-025-00	RES,CHIP	100 5% 1/10W

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REF. NO.	PART.NO	DESCRIPTION	REMARK	REF. NO.	PART.NO	DESCRIPTION	REMARK
R256	1-216-025-00	RES,CHIP	100 5% 1/10W	R331	1-216-059-00	RES,CHIP	2.7K 5% 1/10W
R257	1-216-013-00	RES,CHIP	33 5% 1/10W	R332	1-216-025-00	RES,CHIP	100 5% 1/10W
R258	1-216-049-00	RES,CHIP	1K 5% 1/10W	R333	1-216-075-00	RES,CHIP	12K 5% 1/10W
R265	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R334	1-216-041-00	RES,CHIP	470 5% 1/10W
R266	1-216-073-71	RES,CHIP	10K 5% 1/10W	R335	1-216-675-11	METAL CHIP	10K 0.50% 1/10W
R267	1-216-073-71	RES,CHIP	10K 5% 1/10W	R336	1-216-109-00	RES,CHIP	330K 5% 1/10W
R270	1-216-022-00	RES,CHIP	75 5% 1/10W	R337	1-216-025-00	RES,CHIP	100 5% 1/10W
R271	1-216-022-00	RES,CHIP	75 5% 1/10W	R338	1-216-051-00	RES,CHIP	1.2K 5% 1/10W
R272	1-216-022-00	RES,CHIP	75 5% 1/10W	R339	1-216-049-00	RES,CHIP	1K 5% 1/10W
R273	1-216-022-00	RES,CHIP	75 5% 1/10W	R340	1-216-025-00	RES,CHIP	100 5% 1/10W
R280	1-216-049-00	RES,CHIP	1K 5% 1/10W	R341	1-216-025-00	RES,CHIP	100 5% 1/10W
R281	1-216-089-00	RES,CHIP	47K 5% 1/10W	R342	1-216-049-00	RES,CHIP	1K 5% 1/10W
R282	1-216-093-00	RES,CHIP	68K 5% 1/10W	R343	1-216-061-00	RES,CHIP	3.3K 5% 1/10W
R283	1-216-049-00	RES,CHIP	1K 5% 1/10W	R344	1-216-067-00	RES,CHIP	5.6K 5% 1/10W
R284	1-216-089-00	RES,CHIP	47K 5% 1/10W	R345	1-216-025-00	RES,CHIP	100 5% 1/10W
R285	1-216-093-00	RES,CHIP	68K 5% 1/10W	R346	1-216-063-91	RES,CHIP	3.9K 5% 1/10W
R286	1-216-049-00	RES,CHIP	1K 5% 1/10W	R347	1-216-025-00	RES,CHIP	100 5% 1/10W
R291	1-216-049-71	RES,CHIP	1K 5% 1/10W	R348	1-216-025-00	RES,CHIP	100 5% 1/10W
R292	1-216-049-71	RES,CHIP	1K 5% 1/10W	R349	1-216-025-00	RES,CHIP	100 5% 1/10W
R293	1-216-049-71	RES,CHIP	1K 5% 1/10W	R350	1-216-042-00	RES,CHIP	510 5% 1/10W
R294	1-216-049-71	RES,CHIP	1K 5% 1/10W	R351	1-216-053-00	RES,CHIP	1.5K 5% 1/10W
R295	1-216-049-71	RES,CHIP	1K 5% 1/10W	R352	1-216-077-00	RES,CHIP	15K 5% 1/10W
R296	1-216-049-71	RES,CHIP	1K 5% 1/10W	R353	1-216-033-00	RES,CHIP	220 5% 1/10W
R300	1-216-025-00	RES,CHIP	100 5% 1/10W	R354	1-216-295-00	SHORT	0
R301	1-216-033-00	RES,CHIP	220 5% 1/10W	R357	1-216-049-00	RES,CHIP	1K 5% 1/10W
R302	1-216-295-00	SHORT	0	R358	1-216-295-00	SHORT	0
R303	1-216-295-00	SHORT	0	R360	1-216-049-00	RES,CHIP	1K 5% 1/10W
R308	1-216-025-00	RES,CHIP	100 5% 1/10W	R362	1-216-049-00	RES,CHIP	1K 5% 1/10W
R309	1-216-033-00	RES,CHIP	220 5% 1/10W	R364	1-216-049-00	RES,CHIP	1K 5% 1/10W
R310	1-216-033-00	RES,CHIP	220 5% 1/10W	R370	1-216-295-00	SHORT	0
R311	1-216-295-00	SHORT	0	R1001	1-216-025-00	RES,CHIP	100 5% 1/10W
R312	1-216-295-00	SHORT	0	R1002	1-216-025-00	RES,CHIP	100 5% 1/10W
R314	1-216-295-00	SHORT	0	R1005	1-216-041-00	RES,CHIP	470 5% 1/10W
R315	1-216-295-00	SHORT	0	R1006	1-216-049-00	RES,CHIP	1K 5% 1/10W
R316	1-216-033-00	RES,CHIP	220 5% 1/10W	R1007	1-216-073-00	RES,CHIP	10K 5% 1/10W
R318	1-216-689-11	RES,CHIP	39K 5% 1/10W	R1010	1-216-295-00	SHORT	0
R319	1-216-081-00	RES,CHIP	22K 5% 1/10W	R1012	1-216-041-00	RES,CHIP	470 5% 1/10W
R320	1-216-025-00	RES,CHIP	100 5% 1/10W	R1014	1-216-065-00	RES,CHIP	4.7K 5% 1/10W
R321	1-216-025-00	RES,CHIP	100 5% 1/10W	R1015	1-216-041-00	RES,CHIP	470 5% 1/10W
R322	1-216-025-00	RES,CHIP	100 5% 1/10W	R1016	1-216-073-00	RES,CHIP	10K 5% 1/10W
R323	1-216-033-00	RES,CHIP	220 5% 1/10W	R1017	1-216-295-00	SHORT	0
R324	1-216-063-91	RES,CHIP	3.9K 5% 1/10W	R1020	1-216-097-00	RES,CHIP	100K 5% 1/10W
R326	1-216-025-00	RES,CHIP	100 5% 1/10W	R1021	1-216-029-00	RES,CHIP	150 5% 1/10W
R327	1-216-025-00	RES,CHIP	100 5% 1/10W	R1022	1-216-029-00	RES,CHIP	150 5% 1/10W
R328	1-216-129-00	RES,CHIP	2.2M 5% 1/10W	R1023	1-216-029-00	RES,CHIP	150 5% 1/10W
R329	1-216-083-00	RES,CHIP	27K 5% 1/10W	R1024	1-216-045-00	RES,CHIP	680 5% 1/10W
R330	1-216-025-00	RES,CHIP	100 5% 1/10W	R1026	1-216-025-00	RES,CHIP	100 5% 1/10W

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IF (KV-29FX11A/29FX11D/29FX11E/
29FX11K/29FX11R/29FX11U)

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
R1027	1-216-025-00	RES,CHIP	100 5% 1/10W			< IC >	
R1028	1-216-025-00	RES,CHIP	100 5% 1/10W				
		< TUNER >					
TU101	1-693-338-11	TUNER/VIF (AEP)	(KV-29FX11A/29FX11D/29FX11E/ KV-29FX11K/29FX11R)	IC01	8-759-385-26	IC TDA4472-CFLG3	
	1-693-340-11	TUNER/VIF (FR)	(KV-29FX11B)			< COIL >	
	1-693-339-11	TUNER/VIF (UK)	(KV-29FX11U)	L02	1-408-408-00	INDUCTOR	8.2UH
				L04	1-408-419-00	INDUCTOR	68UH
				L08	1-410-992-11	INDUCTOR CHIP	0.82UH
		< CRYSTAL >				< VARIABLE COIL >	
X1	1-767-154-21	VIBRATOR, CERAMIC		LV01	1-411-874-11	COIL	
X201	1-760-628-11	VIBRATOR, CRYSTAL				< TRANSISTOR >	
X301	1-567-504-11	OSCILLATOR, CRYSTAL					
X302	1-567-505-11	OSCILLATOR, CRYSTAL		Q01	8-729-216-22	TRANSISTOR 2SA1162-G	
X303	1-767-127-11	VIBRATOR, CERAMIC				< RESISTOR >	
X1001	1-579-965-21	VIBRATOR, CRYSTAL					
*****				JR01	1-216-296-91	METAL GLAZE	0 5% 1/8W
	A-1652-037-A	IF BOARD, COMPLETE	(KV-29FX11A/29FX11D/ KV-29FX11E/29FX11K/ KV-29FX11R)	JR02	1-216-296-91	METAL GLAZE	0 5% 1/8W
		*****		JR03	1-216-295-00	METAL GLAZE	0 5% 1/10W
	A-1652-038-A	IF BOARD, COMPLETE	(KV-29FX11U)	JR04	1-216-296-91	METAL GLAZE	0 5% 1/8W
		*****		JR05	1-216-295-00	METAL GLAZE	0 5% 1/10W
		< CAPACITOR >		JR07	1-216-295-00	METAL GLAZE	0 5% 1/10W
C01	1-164-337-11	CERAMIC CHIP 2.2MF	16V	R01	1-216-029-00	METAL GLAZE	150 5% 1/10W
C02	1-164-337-11	CERAMIC CHIP 2.2MF	16V	R02	1-216-089-91	METAL GLAZE	47K 5% 1/10W
C03	1-104-957-11	ELECT 47MF	20% 16V	R03	1-216-089-91	METAL GLAZE	47K 5% 1/10W
C04	1-135-259-11	TANTAL. CHIP 10MF	20% 6.3V	R04	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
C05	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	R05	1-216-081-00	METAL GLAZE	22K 5% 1/10W
C06	1-164-005-11	CERAMIC CHIP 0.47MF	16V	R06	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
C08	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	R07	1-216-025-91	METAL GLAZE	100 5% 1/10W
C09	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	R08	1-216-174-00	METAL GLAZE	100 5% 1/8W
C10	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	R09	1-216-045-00	METAL GLAZE	680 5% 1/10W
C11	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V			(KV-29FX11A/29FX11D/29FX11E/ KV-29FX11K/29FX11R)	
C15	1-124-282-00	ELECT 22MF	20% 25V		1-216-049-91	METAL GLAZE	1K 5% 1/10W
C16	1-162-638-11	CERAMIC CHIP 1MF	16V			(KV-29FX11U)	
C18	1-164-337-11	CERAMIC CHIP 2.2MF	16V	R10	1-216-041-00	METAL GLAZE	470 5% 1/10W
C19	1-124-937-11	ELECT 10MF	20% 16V	R11	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
		< FILTER >		R23	1-216-049-91	METAL GLAZE	1K 5% 1/10W
CF01	1-404-134-00	TRAP, CERAMIC (5.5MHZ)		R24	1-216-295-91	METAL GLAZE	0 5% 1/10W
		(KV-29FX11A/29FX11D/29FX11E/ KV-29FX11K/29FX11R)		R25	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
	1-409-333-21	TRAP, CERAMIC (6.0MHZ)	(KV-29FX11U)			< VARIABLE RESISTOR >	
SWF04	1-767-084-11	FILTER, SURFACE WAVE		RV01	1-226-703-11	RES, ADJ, METAL GLAZE	10K

IF (KV-29FX11B)

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
A-1652-036-A IF BOARD, COMPLETE (KV-29FX11B)				< TRANSISTOR >			

< CAPACITOR >							
C01	1-162-638-11	CERAMIC CHIP 1MF	16V	Q01	8-729-216-22	TRANSISTOR 2SA1162-G	
C02	1-164-337-11	CERAMIC CHIP 2.2MF	16V	Q02	8-729-035-11	TRANSISTOR BF799-GEG	
C03	1-104-957-11	ELECT 47MF	20% 16V	Q03	8-729-035-11	TRANSISTOR BF799-GEG	
C04	1-135-259-11	TANTAL. CHIP 10MF	20% 6.3V	Q04	8-729-901-01	TRANSISTOR DTC144EK	
C05	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	< RESISTOR >			
C06	1-164-005-11	CERAMIC CHIP 0.47MF	16V	JR01	1-216-296-91	METAL GLAZE 0 5% 1/8W	
C08	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	JR02	1-216-296-91	METAL GLAZE 0 5% 1/8W	
C09	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	JR03	1-216-295-00	METAL GLAZE 0 5% 1/10W	
C10	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	JR04	1-216-296-91	METAL GLAZE 0 5% 1/8W	
C11	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	JR05	1-216-295-00	METAL GLAZE 0 5% 1/10W	
C12	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	JR07	1-216-295-00	METAL GLAZE 0 5% 1/10W	
C13	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	R01	1-216-029-00	METAL GLAZE 150 5% 1/10W	
C14	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	R02	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
C15	1-104-957-11	ELECT 47MF	20% 16V	R03	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
C16	1-162-638-11	CERAMIC CHIP 1MF	16V	R04	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
C17	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	R05	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
C18	1-164-337-11	CERAMIC CHIP 2.2MF	16V	R06	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
C20	1-124-937-11	ELECT 10MF	20% 16V	R07	1-216-025-91	METAL GLAZE 100 5% 1/10W	
C21	1-164-506-11	CERAMIC CHIP 4.7MF	16V	R08	1-216-174-00	METAL GLAZE 100 5% 1/8W	
< FILTER >				R09	1-216-045-00	METAL GLAZE 680 5% 1/10W	
CF01	1-409-430-11	TRAP, CERAMIC		R10	1-216-041-00	METAL GLAZE 470 5% 1/10W	
SWF01	1-579-273-11	FILTER, SURFACE WAVE		R11	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
SWF02	1-760-329-11	FILTER, SURFACE WAVE		R12	1-216-063-91	METAL GLAZE 3.9K 5% 1/10W	
SWF03	1-767-083-11	FILTER, SURFACE WAVE		R13	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
< TRIMMER >				R14	1-216-023-00	METAL GLAZE 82 5% 1/10W	
CT01	1-760-662-11	TRAP, CERAMIC		R15	1-216-017-91	METAL GLAZE 47 5% 1/10W	
< IC >				R16	1-216-033-00	METAL GLAZE 220 5% 1/10W	
IC01	8-759-069-36	IC MC74HC4046AF		R17	1-216-017-91	METAL GLAZE 47 5% 1/10W	
< COIL >				R18	1-216-013-00	METAL GLAZE 33 5% 1/10W	
L02	1-408-406-00	INDUCTOR 5.6UH		R20	1-216-222-00	METAL GLAZE 10K 5% 1/8W	
L04	1-408-419-00	INDUCTOR 68UH		R23	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
L05	1-410-987-11	INDUCTOR CHIP 0.33UH		R25	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
L06	1-408-399-00	INDUCTOR 1.5UH		R21	1-216-174-00	METAL GLAZE 100 5% 1/8W	
< VARIABLE COIL >				< VARIABLE RESISTOR >			
LV01	1-411-874-11	COIL		RV01	1-226-703-11	RES, ADJ, METAL GLAZE 10K	
				RV02	1-226-703-11	RES, ADJ, METAL GLAZE 10K	

The components identified by shading and marked Δ are critical for safety
Replace only with the part number specified.

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
*A-1638-113-A C BOARD, COMPLETE *****				< CRT SOCKET >			
< CAPACITOR >				J701	Δ 1-526-990-21	SOCKET, CRT	
< COIL >				< COIL >			
C702	1-128-551-11	ELECT	22MF 20% 25V	L701	1-410-667-31	INDUCTOR 22UH	
C703	1-126-967-11	ELECT	47MF 20% 10V	< TRANSISTOR >			
C704	1-102-945-00	CERAMIC	8PF 0.5PF 50V	< TRANSISTOR >			
C705	1-102-945-00	CERAMIC	8PF 0.5PF 50V	Q701	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C706	1-102-953-00	CERAMIC	18PF 5% 50V	< RESISTOR >			
C707	1-107-651-11	ELECT	4.7MF 20% 250V	R701	1-247-807-31	CARBON 100 5% 1/4W	
C708	1-126-960-11	ELECT	1MF 20% 50V	R702	1-249-417-11	CARBON 1K 5% 1/4W	
C709	1-101-006-00	CERAMIC	0.047MF 50V	R703	1-249-437-11	CARBON 47K 5% 1/4W	
C710	1-107-651-11	ELECT	4.7MF 20% 250V	R704	1-215-413-00	METAL 470 1% 1/4W	
C711	1-107-651-11	ELECT	4.7MF 20% 250V	R705	1-249-441-11	CARBON 100K 5% 1/4W	
C712	1-101-006-00	CERAMIC	0.047MF 50V	R706	1-535-465-11	LEAD, JUMPER (5.0MM)	
C714	1-101-006-00	CERAMIC	0.047MF 50V	R707	1-215-424-00	METAL 1.3K 1% 1/4W	
C715	1-101-006-00	CERAMIC	0.047MF 50V	R708	1-215-424-00	METAL 1.3K 1% 1/4W	
C716	1-102-157-00	CERAMIC	560PF 10% 500V	R709	1-215-424-00	METAL 1.3K 1% 1/4W	
C717	1-102-157-00	CERAMIC	560PF 10% 500V	R710	1-215-413-00	METAL 470 1% 1/4W	
C718	1-102-157-00	CERAMIC	560PF 10% 500V	R711	1-249-421-11	CARBON 2.2K 5% 1/4W	
C719	1-102-074-00	CERAMIC	0.001MF 10% 50V	R712	1-249-431-11	CARBON 15K 5% 1/4W	
C720	1-137-490-11	FILM	0.01MF 10% 1KV	R718	1-249-422-11	CARBON 2.7K 5% 1/4W	
C721	1-107-651-11	ELECT	4.7MF 20% 250V	R719	1-249-422-11	CARBON 2.7K 5% 1/4W	
C725	1-107-651-11	ELECT	4.7MF 20% 250V	R720	1-249-422-11	CARBON 2.7K 5% 1/4W	
< CONNECTOR >				R722	1-249-435-11	CARBON 33K 5% 1/4W	
CN701	*1-568-882-51	PIN, CONNECTOR 7P		R725	1-215-903-11	METAL OXIDE 68K 5% 2W	F
CN702	1-695-915-11	TAB (CONTACT)		R727	1-215-903-11	METAL OXIDE 68K 5% 2W	F
CN703	1-778-037-11	PIN, CONNECTOR 6P		R729	1-215-903-11	METAL OXIDE 68K 5% 2W	F
CN705	1-695-915-11	TAB (CONTACT)		R731	1-202-818-00	SOLID 1K 20% 1/2W	
CN706	1-695-915-11	TAB (CONTACT)		R732	1-202-818-00	SOLID 1K 20% 1/2W	
< DIODE >				R733	1-202-818-00	SOLID 1K 20% 1/2W	
D701	8-719-109-97	DIODE RD6.8ES-B2		R734	1-247-739-11	CARBON 100 5% 1/2W	
D704	8-719-991-33	DIODE 1SS133T-77		R735	1-244-941-00	CARBON 680K 5% 1/2W	
D705	8-719-991-33	DIODE 1SS133T-77		R737	1-249-496-11	CARBON 100K 5% 1/2W	
D707	8-719-991-33	DIODE 1SS133T-77		R738	1-249-489-11	CARBON 22K 5% 1/2W	
D709	8-719-051-85	DIODE HSS83TD		R740	1-216-391-11	METAL OXIDE 1.5 5% 3W	F
D710	8-719-051-85	DIODE HSS83TD		R742	1-215-912-11	METAL OXIDE 150 5% 3W	F
D711	8-719-051-85	DIODE HSS83TD		R743	1-202-847-00	SOLID 560K 20% 1/2W	
D712	8-719-908-03	DIODE GP08D		< VARIABLE RESISTOR >			
D713	8-719-109-72	DIODE RD3.9ES-B2		RV701	1-241-656-21	RES, ADJ, METAL FILM 110M	
D714	8-719-991-33	DIODE 1SS133T-77		RV702	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
< IC >				< VARIABLE RESISTOR >			
IC701	8-759-346-42	IC TDA6101Q/N3		< VARIABLE RESISTOR >			
IC702	8-759-346-42	IC TDA6101Q/N3		< VARIABLE RESISTOR >			
IC703	8-759-346-42	IC TDA6101Q/N3		< VARIABLE RESISTOR >			



REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
< SPARK GAP >				D2805	8-719-970-87	DIODE ERA38-06	
SG701	1-517-712-31	GAP, SPARK		D2806	8-719-300-33	DIODE RU-3AM	
SG702	1-517-712-31	GAP, SPARK		D2807	8-719-302-43	DIODE EL1Z	
SG703	1-517-712-31	GAP, SPARK		D2808	8-719-970-87	DIODE ERA38-06	
SG704	1-519-421-11	GAP, DISCHARGE		D2810	8-719-991-33	DIODE 1SS133T-77	
*****				D2811	8-719-991-33	DIODE 1SS133T-77	
*A-1640-307-A D5 BOARD, COMPLETE				D2812	8-719-991-33	DIODE 1SS133T-77	
*****				D2813	8-719-991-33	DIODE 1SS133T-77	
< CAPACITOR >				< IC >			
C2801	1-102-244-00	CERAMIC	220PF 10% 500V	IC2801	8-759-103-93	IC UPC393C	
C2804	1-136-165-00	FILM	0.1MF 5% 50V	IC2802	8-759-701-59	IC NJM78M09FA	
C2805	1-164-070-11	CERAMIC	100PF 5% 50V	IC2803	8-759-700-42	IC NJM2904D	
C2806	1-136-347-11	FILM	0.0047MF 5% 630V	< COIL >			
C2808	1-130-491-00	MYLAR	0.047MF 5% 50V	L2801	1-535-465-11	LEAD, JUMPER (5.0MM)	
C2809	1-130-483-00	MYLAR	0.01MF 5% 50V	L2802	1-406-677-11	INDUCTOR 0UH	
C2811	1-129-716-00	FILM	0.015MF 5% 630V	L2803	1-406-989-21	INDUCTOR 0UH	
C2813	1-102-228-00	CERAMIC	470PF 10% 500V	L2805	1-406-667-11	INDUCTOR 0UH	
C2814	1-129-992-00	FILM	0.0024MF 5% 630V	L2806	1-406-679-11	INDUCTOR 0UH	
C2815	1-117-455-11	FILM	22000PF 5% 630V	< TRANSISTOR >			
C2817	1-126-933-11	ELECT	100MF 20% 16V	Q2802	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C2818	1-104-665-11	ELECT	100MF 20% 25V	Q2803	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C2819	1-126-933-11	ELECT	100MF 20% 16V	Q2805	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C2820	1-129-725-00	FILM	0.082MF 5% 400V	Q2806	8-729-039-68	TRANSISTOR IRF620	
C2840	1-102-228-00	CERAMIC	470PF 10% 500V	Q2808	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C2841	1-102-030-00	CERAMIC	330PF 10% 500V	Q2810	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C2842	1-109-954-11	ELECT	0.47MF 20% 160V	Q2811	8-729-140-97	TRANSISTOR 2SB734-34	
C2845	1-130-728-00	FILM	0.0022MF 5% 50V	Q2814	8-729-043-95	TRANSISTOR 2SC3840	
C2846	1-130-491-00	MYLAR	0.047MF 5% 50V	< RESISTOR >			
C2847	1-126-964-11	ELECT	10MF 20% 50V	R2801	1-535-465-11	LEAD, JUMPER (5.0MM)	
C2848	1-136-159-00	FILM	0.033MF 5% 50V	R2802	1-215-919-11	METAL OXIDE 2.2K 5% 3W F	
C2849	1-126-964-11	ELECT	10MF 20% 50V	R2804	1-249-437-11	CARBON 47K 5% 1/4W	
C2850	1-130-483-00	MYLAR	0.01MF 5% 50V	R2805	1-249-429-11	CARBON 10K 5% 1/4W	
C2851	1-136-169-00	FILM	0.22MF 5% 50V	R2806	1-249-413-11	CARBON 470 5% 1/4W	
C2852	1-136-169-00	FILM	0.22MF 5% 50V	R2807	1-249-421-11	CARBON 2.2K 5% 1/4W	
< CONNECTOR >				R2811	1-215-445-00	METAL 10K 1% 1/4W	
CN2804	*1-568-879-11	PIN, CONNECTOR 4P		R2813	1-215-469-00	METAL 100K 1% 1/4W	
CN2805	1-568-878-51	PIN, CONNECTOR 3P		R2814	1-215-445-00	METAL 10K 1% 1/4W	
CN2806	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P		R2815	1-215-469-00	METAL 100K 1% 1/4W	
CN2807	*1-568-881-51	PIN, CONNECTOR 6P		R2816	1-215-443-00	METAL 8.2K 1% 1/4W	
< DIODE >				R2817	1-215-463-00	METAL 56K 1% 1/4W	
D2801	8-719-110-41	DIODE RD15ES-B2		R2818	1-215-473-91	METAL 150K 1% 1/4W	
D2802	8-719-991-33	DIODE 1SS133T-77		R2819	1-249-421-11	CARBON 2.2K 5% 1/4W	
D2804	8-719-302-43	DIODE EL1Z		R2820	1-249-421-11	CARBON 2.2K 5% 1/4W	

The components identified by shading and marked Δ are critical for safety
Replace only with the part number specified.

KV-29FX11

D5

D

REF.NO.	PART.NO	DESCRIPTION			REMARK		REF.NO.	PART.NO	DESCRIPTION			REMARK	
R2821	1-247-807-31	CARBON	100	5%	1/4W		< CAPACITOR >						
R2823	1-535-465-11	LEAD, JUMPER (5.0MM)											
R2824	1-249-425-11	CARBON	4.7K	5%	1/4W		C502	1-102-824-91	CERAMIC	470PF	5%	50V	
R2825	1-249-417-11	CARBON	1K	5%	1/4W		C503	1-136-165-00	FILM	0.1MF	5%	50V	
R2826	1-249-417-11	CARBON	1K	5%	1/4W		C504	1-102-824-91	CERAMIC	470PF	5%	50V	
							C506	1-126-941-11	ELECT	470MF	20%	25V	
							C507	1-109-953-11	ELECT	2.2MF	20%	50V	
R2827	1-249-441-11	CARBON	100K	5%	1/4W								
R2828	1-249-441-11	CARBON	100K	5%	1/4W		C509	1-136-165-00	FILM	0.1MF	5%	50V	
R2829	1-249-441-11	CARBON	100K	5%	1/4W		C510	1-126-969-11	ELECT	220MF	20%	50V	
R2830	1-215-911-11	METAL OXIDE	100	5%	3W	F	C511	1-136-202-11	FILM	0.33MF	5%	63V	
R2831	1-215-911-11	METAL OXIDE	100	5%	3W	F	C513	1-106-220-00	MYLAR	0.1MF	10%	100V	
							C514	1-136-165-00	FILM	0.1MF	5%	50V	
R2832	1-249-379-11	CARBON	0.68	5%	1/4W	F							
R2840	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F	C515	1-126-941-11	ELECT	470MF	20%	25V	
R2841	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F	C517	1-126-941-11	ELECT	470MF	20%	25V	
R2842	1-215-923-00	METAL OXIDE	10K	5%	3W	F	C518	1-102-228-00	CERAMIC	470PF	10%	500V	
R2843	1-215-923-00	METAL OXIDE	10K	5%	3W	F	C519	1-102-228-00	CERAMIC	470PF	10%	500V	
							C520	1-126-941-11	ELECT	470MF	20%	25V	
R2844	1-249-409-11	CARBON	220	5%	1/4W	F							
R2845	1-215-489-00	METAL	680K	1%	1/4W		C521	1-107-698-11	ELECT	10MF	20%	25V	
R2846	1-247-903-00	CARBON	1M	5%	1/4W		C522	1-126-964-11	ELECT	10MF	20%	50V	
R2847	1-249-429-11	CARBON	10K	5%	1/4W		C523	1-136-165-00	FILM	0.1MF	5%	50V	
R2848	1-215-449-00	METAL	15K	1%	1/4W		C600	△ 1-113-920-11	CERAMIC	0.0022MF	20%	250V	
							C601	△ 1-162-599-12	CERAMIC	0.0047MF		250V	
R2849	1-215-491-00	METAL	820K	1%	1/4W		C602	△ 1-162-599-12	CERAMIC	0.0047MF		250V	
R2850	1-215-445-00	METAL	10K	1%	1/4W		C603	1-125-555-11	ELECT (BLOCK)	330MF	20%	400V	
R2851	1-215-445-00	METAL	10K	1%	1/4W		C604	1-126-968-11	ELECT	100MF	20%	50V	
R2852	1-215-481-00	METAL	330K	1%	1/4W		C605	1-107-929-11	ELECT	10MF	20%	100V	
R2853	1-215-477-00	METAL	220K	1%	1/4W		C606	1-162-318-11	CERAMIC	0.001MF	10%	500V	
R2854	1-215-457-00	METAL	33K	1%	1/4W		C607	1-104-666-11	ELECT	220MF	20%	25V	
R2855	1-215-457-00	METAL	33K	1%	1/4W		C608	1-109-880-11	FILM	0.0015MF	3%	2KV	
R2856	1-247-807-31	CARBON	100	5%	1/4W		C611	1-102-228-00	CERAMIC	470PF	10%	500V	
R2857	1-249-413-11	CARBON	470	5%	1/4W		C612	1-111-160-11	ELECT	22MF	20%	100V	
R2858	1-249-424-11	CARBON	3.9K	5%	1/4W		C613	1-124-347-00	ELECT	100MF	20%	160V	
R2859	1-247-807-31	CARBON	100	5%	1/4W		C614	1-126-933-11	ELECT	100MF	20%	16V	
R2860	1-215-886-11	METAL OXIDE	100	5%	2W	F	C615	1-115-789-11	ELECT	0.001F	20%	25V	
R2861	1-215-886-11	METAL OXIDE	100	5%	2W	F	C616	1-115-789-11	ELECT	0.001F	20%	25V	
							C617	1-128-339-11	ELECT	2200MF	20%	16V	
							C618	1-136-165-00	FILM	0.1MF	5%	50V	
< TRANSFORMER >													
T2801	1-424-584-11	TRANSFORMER, DYNAMIC FOCUS					C619	1-102-228-00	CERAMIC	470PF	10%	500V	
*****							C620	1-102-228-00	CERAMIC	470PF	10%	500V	
	*A-1642-232-A	D BOARD, COMPLETE					C621	1-136-165-00	FILM	0.1MF	5%	50V	
		*****					C622	1-107-925-11	ELECT	1MF	20%	100V	
							C623	1-104-666-11	ELECT	220MF	20%	25V	
	4-201-023-01	SPACER, INSULATING											
	4-202-373-01	SPRING, IC					C624	1-136-165-00	FILM	0.1MF	5%	50V	
	4-202-373-01	SPRING, IC					C625	1-126-967-11	ELECT	47MF	20%	50V	
							C626	1-104-666-11	ELECT	220MF	20%	25V	
	4-202-710-01	SPACER, INSULATING					C628	1-126-964-11	ELECT	10MF	20%	50V	
	4-382-854-11	SCREW (M3X10) , P, SW (+)					C629	1-111-097-11	ELECT	0.0022F	20%	35V	

D

The components identified by shading and marked Δ are critical for safety
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REF. NO.	PART.NO	DESCRIPTION	REMARK
C630	1-111-097-11	ELECT 0.0022F 20% 35V	
C631	1-126-965-11	ELECT 22MF 20% 50V	
C632	1-104-666-11	ELECT 220MF 20% 25V	
C633 Δ	1-107-563-11	FILM 0.1MF 20% 300V	
C635 Δ	1-107-563-11	FILM 0.1MF 20% 300V	
C636 Δ	1-113-920-11	CERAMIC 0.0022MF 20% 250V	
C638	1-136-203-11	FILM 0.01MF 10% 250V	
C640	1-106-220-00	MYLAR 0.1MF 10% 100V	
C641 Δ	1-161-744-00	CERAMIC 0.01MF 400V	
C642 Δ	1-161-744-00	CERAMIC 0.01MF 400V	
C644	1-137-043-11	FILM 0.0047MF 10% 400V	
C647	1-162-116-00	CERAMIC 680PF 10% 2KV	
C651	1-102-228-00	CERAMIC 470PF 10% 500V	
C800	1-137-368-11	FILM 0.0047MF 5% 50V	
C801	1-137-399-11	FILM 0.1MF 5% 50V	
C802	1-137-370-11	FILM 0.01MF 5% 50V	
C803	1-129-898-00	FILM 0.0022MF 5% 630V	
C805	1-136-207-11	FILM 0.047MF 10% 250V	
C806	1-104-999-11	MYLAR 0.1MF 10% 200V	
C807	1-136-540-11	FILM 0.82MF 5% 200V	
C808	1-136-104-00	FILM 0.16MF 5% 200V	
C810	1-107-683-11	ELECT 2.2MF 0 250V	
C811	1-102-212-00	CERAMIC 820PF 10% 500V	
C812	1-136-540-11	FILM 0.82MF 5% 200V	
C813	1-130-118-00	FILM 0.051MF 5% 400V	
C814	1-136-617-11	FILM 0.019MF 3% 2KV	
C815	1-137-046-11	FILM 0.0082MF 10% 400V	
C816	1-161-754-00	CERAMIC 0.001MF 10% 2KV	
C817	1-161-754-00	CERAMIC 0.001MF 10% 2KV	
C818	1-161-754-00	CERAMIC 0.001MF 10% 2KV	
C819	1-136-208-11	FILM 0.068MF 10% 250V	
C821	1-162-114-00	CERAMIC 0.0047MF 2KV	
C822	1-107-662-11	ELECT 22MF 20% 250V	
C824	1-123-024-21	ELECT 33MF 160V	
C826	1-161-830-00	CERAMIC 0.0047MF 500V	
C829	1-126-959-11	ELECT 0.47MF 20% 50V	
C830	1-136-173-00	FILM 0.47MF 5% 50V	
C834	1-128-551-11	ELECT 22MF 20% 25V	
C835	1-162-318-11	CERAMIC 0.001MF 10% 500V	
C836	1-162-117-00	CERAMIC 100PF 10% 500V	
C837	1-102-119-00	CERAMIC 0.0015MF 10% 50V	
C838	1-102-228-00	CERAMIC 470PF 10% 500V	
C839	1-136-207-11	FILM 0.047MF 10% 250V	
C841	1-102-114-00	CERAMIC 470PF 10% 50V	
C845	1-247-901-11	CARBON 820K 5% 1/4W	
C902	1-137-372-11	FILM 0.022MF 5% 50V	
C903	1-137-372-11	FILM 0.022MF 5% 50V	

REF. NO.	PART.NO	DESCRIPTION	REMARK
C904	1-126-933-11	ELECT 100MF 20% 16V	
C905	1-126-964-11	ELECT 10MF 20% 50V	
C906	1-126-964-11	ELECT 10MF 20% 50V	
C907	1-126-964-11	ELECT 10MF 20% 50V	
C908	1-126-964-11	ELECT 10MF 20% 50V	
C910	1-535-465-11	LEAD, JUMPER (5.0MM)	
C911	1-126-964-11	ELECT 10MF 20% 50V	
C916	1-162-318-11	CERAMIC 0.001MF 10% 500V	
C1200	1-136-165-00	FILM 0.1MF 5% 50V	
C1201	1-109-953-11	ELECT 2.2MF 20% 50V	
C1202	1-109-953-11	ELECT 2.2MF 20% 50V	
C1203	1-136-169-00	FILM 0.22MF 5% 50V	
C1204	1-136-169-00	FILM 0.22MF 5% 50V	
C1205	1-101-005-00	CERAMIC 0.022MF 50V	
C1206	1-101-005-00	CERAMIC 0.022MF 50V	
C1207	1-126-933-11	ELECT 100MF 20% 16V	
C1208	1-126-963-11	ELECT 4.7MF 20% 50V	
C1209	1-126-963-11	ELECT 4.7MF 20% 50V	
C1210	1-126-941-91	ELECT 470MF 20% 25V	
C1212	1-137-372-11	FILM 0.022MF 5% 50V	
C1213	1-137-372-11	FILM 0.022MF 5% 50V	
C1214	1-126-933-11	ELECT 100MF 20% 16V	
C1215	1-136-173-00	FILM 0.47MF 5% 50V	
C1216	1-136-376-91	FILM 0.0027MF 5% 50V	
C1217	1-136-376-91	FILM 0.0027MF 5% 50V	
C1218	1-126-941-11	ELECT 470MF 20% 25V	
C1223	1-102-129-91	CERAMIC 0.01MF 10% 50V	
< CONNECTOR >			
CN600 Δ	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
CN601 Δ	1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
CN603 Δ	*1-580-844-11	PIN, CONNECTOR (POWER)	
CN800	*1-580-798-11	CONNECTOR PIN (DY) 6P	
CN801	*1-568-879-11	PIN, CONNECTOR 4P	
CN802	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P	
CN803	1-695-915-11	TAB (CONTACT)	
CN804	1-778-037-11	PIN, CONNECTOR 6P	
CN900	1-779-947-21	TERMINAL BLOCK, S	
CN902	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P	
CN1401	*1-568-880-51	PIN, CONNECTOR 5P	
CN1403	1-564-511-11	PIN, CONNECTOR 8P	
CN1408	*1-568-879-11	PIN, CONNECTOR 4P	
CN1803	*1-568-879-11	PIN, CONNECTOR 4P	
< DIODE >			
D500	8-719-109-85	DIODE RD5.1ES-B2	
D502	8-719-979-85	DIODE EGP20G	

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REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
D503	8-719-979-85	DIODE EGP20G		D902	8-719-923-60	DIODE MTZJ-T-77-9.1	
D504	8-719-991-33	DIODE 1SS133T-77		D903	8-719-923-60	DIODE MTZJ-T-77-9.1	
D505	8-719-982-03	DIODE MTZJ-3.6A		D904	8-719-923-60	DIODE MTZJ-T-77-9.1	
D506	8-719-991-33	DIODE 1SS133T-77		D905	8-719-923-60	DIODE MTZJ-T-77-9.1	
D507	8-719-109-85	DIODE RD5.1ES-B2		D906	8-719-923-60	DIODE MTZJ-T-77-9.1	
D510	8-719-924-13	DIODE MTZJ-T-77-22B		D907	8-719-109-89	DIODE RD5.6ESB2	
D570	8-719-924-13	DIODE MTZJ-T-77-22B		D910	8-719-923-60	DIODE MTZJ-T-77-9.1	
D571	8-719-924-13	DIODE MTZJ-T-77-22B		D920	8-719-109-89	DIODE RD5.6ESB2	
D600	8-719-510-53	DIODE D4SB60L		D1201	8-719-109-72	DIODE RD3.9ES-B2	
D601	8-719-046-77	DIODE EM1-V1		D1202	1-535-465-11	LEAD, JUMPER (5.0MM)	
D603	8-719-109-97	DIODE RD6.8ES-B2		< FUSE >			
D604	8-719-046-75	DIODE EU-1-V1		F601	Δ 1-576-232-21	FUSE (H.B.C.) 5.0A/250V	
D605	8-719-302-43	DIODE EL1Z			Δ *1-533-725-11	HOLDER, FUSE (F601)	
D606	8-719-302-43	DIODE EL1Z		< FERRITE BEAD >			
D607	8-719-046-78	DIODE EG-1Z-V1		FB600	1-410-397-21	FERRITE 1.1UH	
D608	8-719-302-06	DIODE EU2A		FB601	1-410-397-21	FERRITE 1.1UH	
D609	8-719-312-10	DIODE RU4AM-T3		FB602	1-410-397-21	FERRITE 1.1UH	
D610	8-719-046-74	DIODE AU-01Z-V1		FB604	1-410-396-41	FERRITE 0.45UH	
D611	8-719-058-38	DIODE FMN-G12S		FB605	1-410-396-41	FERRITE 0.45UH	
D612	8-719-046-76	DIODE RU3YX-LF-C4		FB606	1-410-397-21	FERRITE 1.1UH	
D613	8-719-058-38	DIODE FMN-G12S		FB607	1-410-397-21	FERRITE 1.1UH	
D614	8-719-058-38	DIODE FMN-G12S		FB608	1-410-396-41	FERRITE 0.45UH	
D615	8-719-046-75	DIODE EU-1-V1		FB800	1-410-397-21	FERRITE 1.1UH	
D616	8-719-110-03	DIODE RD7.5ESB2		< IC >			
D617	8-719-991-33	DIODE 1SS133T-77		IC500	8-759-192-71	IC STV9379	
D618	8-719-991-33	DIODE 1SS133T-77		IC600	8-749-010-92	IC STR-S6709	
D619	8-719-991-33	DIODE 1SS133T-77		IC601	Δ 8-749-013-21	IC TLP721 (D4-G,T)	
D620	8-719-991-33	DIODE 1SS133T-77		IC602	8-749-920-61	IC SE-135N	
D622	8-719-923-60	DIODE MTZJ-T-77-9.1A		IC603	8-759-144-82	IC UPC2405HF	
D625	8-719-991-33	DIODE 1SS133T-77		IC604	8-759-510-52	IC L4941BV	
D626	8-719-046-74	DIODE AU-01Z-V1		IC606	8-759-267-25	IC LM2940T-9.0	
D631	8-719-109-93	DIODE RD6.2ESB2		IC800	8-759-103-93	IC UPC393C	
D637	8-719-110-17	DIODE RD10ESB2		IC900	8-742-014-11	HYB IC SBX1981-51	
D800	8-719-991-33	DIODE 1SS133T-77		IC1200	8-759-250-68	IC TDA7264	
D801	8-719-991-33	DIODE 1SS133T-77		IC1201	8-759-502-21	IC TDA2822M	
D802	1-535-465-11	LEAD, JUMPER (5.0MM)		< SOCKET >			
D803	8-719-908-03	DIODE GP08D		J900	1-764-606-11	JACK	
D807	8-719-302-43	DIODE EL1Z		J1200	1-770-218-11	JACK, PIN	
D808	8-719-908-03	DIODE GP08D		< COIL >			
D809	8-719-031-34	DIODE RGP02-20EG23		L501	1-535-465-11	LEAD, JUMPER (5.0MM)	
D810	8-719-302-43	DIODE EL1Z		L502	1-412-519-11	INDUCTOR 3.3UH	
D811	8-719-110-41	DIODE RD15ES-B2		L503	1-412-519-11	INDUCTOR 3.3UH	
D812	8-719-038-49	DIODE FMS-3FU-LF027-103					
D815	8-719-908-03	DIODE GP08D					
D817	8-719-109-85	DIODE RD5.1ES-B2					
D901	8-719-030-11	DIODE SLA-570KT3F					
	*4-203-258-11	HOLDER, LED (D901)					

D

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REF. NO.	PART.NO	DESCRIPTION	REMARK	REF. NO.	PART.NO	DESCRIPTION	REMARK
L609	1-412-533-21	INDUCTOR 47UH		< RESISTOR >			
L610	1-535-465-11	LEAD, JUMPER (5.0MM)		R500	1-215-457-00	METAL 33K 1%	1/4W
L611	1-412-527-11	INDUCTOR 15UH		R502	1-249-421-11	CARBON 2.2K 5%	1/4W
L612	1-412-522-41	INDUCTOR 5.6UH		R503	1-249-429-11	CARBON 10K 5%	1/4W
L613	1-412-522-41	INDUCTOR 5.6UH		R504	1-215-457-00	METAL 33K 1%	1/4W
L615	1-412-529-11	INDUCTOR 22UH		R505	1-249-382-11	CARBON 1.2 5%	1/4W F
L616	1-412-533-21	INDUCTOR 47UH		R506	1-215-437-00	METAL 4.7K 1%	1/4W
L801	1-459-111-00	INDUCTOR 0UH		R507	1-215-888-00	METAL OXIDE 220 5%	2W F
L802	1-459-104-00	COIL, WITH CORE		R508	1-216-371-00	METAL OXIDE 1.5 5%	2W F
L803	1-535-465-11	LEAD, JUMPER (5.0MM)		R509	1-249-443-11	CARBON 0.47 5%	1/4W F
L805	1-406-674-11	INDUCTOR 0UH		R510	1-249-443-11	CARBON 0.47 5%	1/4W F
L806	1-535-465-11	LEAD, JUMPER (5.0MM)		R519	1-215-445-00	METAL 10K 1%	1/4W
L809	1-408-611-31	INDUCTOR 47UH		R520	1-215-451-00	METAL 18K 1%	1/4W
L810	1-535-465-11	LEAD, JUMPER (5.0MM)		R521	1-215-455-00	METAL 27K 1%	1/4W
L811	1-406-978-11	INDUCTOR 0UH		R522	1-247-863-91	CARBON 22K 5%	1/4W
L813	1-412-552-11	INDUCTOR 2.2MMH		R523	1-247-863-91	CARBON 22K 5%	1/4W
L901	1-408-603-31	INDUCTOR 10UH		R524	1-249-425-11	CARBON 4.7K 5%	1/4W
L902	1-408-603-31	INDUCTOR 10UH		R525	1-249-425-11	CARBON 4.7K 5%	1/4W
L903	1-408-591-41	INDUCTOR 1UH		R526	1-249-421-11	CARBON 2.2K 5%	1/4W
L904	1-408-591-41	INDUCTOR 1UH		R527	1-215-437-00	METAL 4.7K 1%	1/4W
< IC LINK >				R600 Δ	1-216-490-11	METAL OXIDE 39K 5%	3W F
PS600 Δ	1-532-686-21	LINK, IC 2.7A (ICP-F75)		R601	1-249-417-11	CARBON 1K 5%	1/4W
PS601 Δ	1-532-686-21	LINK, IC 2.7A (ICP-F75)		R602	1-215-473-00	METAL 150K 1%	1/4W
PS602 Δ	1-532-686-21	LINK, IC 2.7A (ICP-F75)		R603	1-215-898-11	METAL OXIDE 10K 5%	2W F
PS603 Δ	1-532-686-21	LINK, IC 2.7A (ICP-F75)		R604	1-249-420-11	CARBON 1.8K 5%	1/4W
< TRANSISTOR >				R605	1-216-362-11	METAL OXIDE 0.27 5%	2W F
Q501	8-729-119-78	TRANSISTOR 2SC2785-HFE		R606	1-535-143-21	LEAD, JUMPER (12.5MM)	
Q502	8-729-119-76	TRANSISTOR 2SA1175-HFE		R607	1-216-421-11	METAL OXIDE 12 5%	1W F
Q503	8-729-030-02	TRANSISTOR DTC144ESA		R608	1-216-365-00	METAL OXIDE 0.47 5%	2W F
Q601	8-729-025-04	TRANSISTOR 2SC3852A		R609	1-535-465-11	LEAD, JUMPER (5.0MM)	
Q602	8-729-320-28	TRANSISTOR 2SA1667		R610	1-215-429-00	METAL 2.2K 1%	1/4W
Q603	8-729-805-05	TRANSISTOR 2SC3601-E		R611	1-216-354-11	METAL OXIDE 2.7 5%	1W F
Q604	8-729-024-35	TRANSISTOR 2SC2808TP-R		R612	1-249-428-11	CARBON 8.2K 5%	1/4W
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE		R613	1-249-417-11	CARBON 1K 5%	1/4W
Q606	8-729-900-65	TRANSISTOR DTA144ES		R614	1-215-877-11	METAL OXIDE 22K 5%	1W F
Q607	8-729-119-78	TRANSISTOR 2SC2785-HFE		R615	1-249-435-11	CARBON 33K 5%	1/4W
Q801	8-729-039-68	TRANSISTOR IRF620		R616	1-215-471-00	METAL 120K 1%	1/4W
Q802	8-729-042-86	TRANSISTOR 2SC5251-01		R617	1-215-901-00	METAL OXIDE 33K 5%	2W F
Q803	8-729-119-80	TRANSISTOR 2SC2688-LK		R618	1-247-863-91	CARBON 22K 5%	1/4W
Q805	8-729-030-02	TRANSISTOR DTC144ESA		R619	1-216-425-11	METAL OXIDE 56 5%	1W F
Q900	8-729-119-78	TRANSISTOR 2SC2785-HFE		R620	1-260-131-11	CARBON 470K 5%	1/2W
Q1200	8-729-119-78	TRANSISTOR 2SC2785-HFE		R621	1-216-425-11	METAL OXIDE 56 5%	1W F
Q1201	8-729-029-94	TRANSISTOR DTC143TSA		R622	1-249-437-11	CARBON 47K 5%	1/4W
Q1202	8-729-029-66	TRANSISTOR DTC114ESA		R624	1-249-393-11	CARBON 10 5%	1/4W F
Q1203	8-729-029-94	TRANSISTOR DTC143TSA		R625	1-249-434-11	CARBON 27K 5%	1/4W
Q1204	8-729-029-94	TRANSISTOR DTC143TSA		R626	1-249-430-11	CARBON 12K 5%	1/4W

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KV-29FX11

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REF.NO.	PART.NO	DESCRIPTION	REMARK				REF.NO.	PART.NO	DESCRIPTION	REMARK			
R627	1-216-347-11	METAL OXIDE	0.68	5%	1W	F	R836	1-249-439-11	CARBON	68K	5%	1/4W	
R628	1-249-415-11	CARBON	680	5%	1/4W	F	R838	1-215-455-00	METAL	27K	1%	1/4W	
R629	Δ 1-260-135-11	CARBON	1M	5%	1/2W		R840	1-247-807-31	CARBON	100	5%	1/4W	
R630	Δ 1-218-265-11	METAL	8.2M	5%	1W		R841	1-249-418-11	CARBON	1.2K	5%	1/4W	
R631	Δ 1-202-961-11	CEMENTED	1.8	5%	10W	F	R842	1-249-441-11	CARBON	100K	5%	1/4W	
R632	1-247-807-31	CARBON	100	5%	1/4W		R843	1-249-440-11	CARBON	82K	5%	1/4W	
R633	1-247-807-31	CARBON	100	5%	1/4W		R844	1-535-143-11	LEAD, JUMPER (10.0MM)				
R634	1-249-397-11	CARBON	22	5%	1/4W	F	R847	1-247-885-00	CARBON	180K	5%	1/4W	
R635	1-249-437-11	CARBON	47K	5%	1/4W		R851	1-215-898-11	METAL OXIDE	10K	5%	2W	F
R636	1-249-417-11	CARBON	1K	5%	1/4W		R852	1-249-432-11	CARBON	18K	5%	1/4W	
R637	1-247-815-91	CARBON	220	5%	1/4W		R853	1-216-361-00	METAL OXIDE	0.22	5%	2W	F
R638	1-247-863-91	CARBON	22K	5%	1/4W		R900	1-247-815-91	CARBON	220	5%	1/4W	
R639	1-215-425-00	METAL	1.5K	1%	1/4W		R901	1-247-734-11	CARBON	39	5%	1/2W	
R642	Δ 1-202-961-11	CEMENTED	1.8	5%	10W	F	R902	1-247-734-11	CARBON	39	5%	1/2W	
R645	1-249-422-11	CARBON	2.7K	5%	1/4W		R904	1-249-389-11	CARBON	4.7	5%	1/4W	F
R646	1-249-377-11	CARBON	0.47	5%	1/4W	F	R905	1-247-804-11	CARBON	75	5%	1/4W	
R647	1-202-933-61	FUSIBLE	0.1	10%	1/2W	F	R906	1-247-804-11	CARBON	75	5%	1/4W	
R649	1-249-426-11	CARBON	5.6K	5%	1/4W		R907	1-247-804-11	CARBON	75	5%	1/4W	
R800	1-249-429-11	CARBON	10K	5%	1/4W		R908	1-249-401-11	CARBON	47	5%	1/4W	
R802	1-215-441-00	METAL	6.8K	1%	1/4W		R909	1-249-429-11	CARBON	10K	5%	1/4W	
R803	1-249-421-11	CARBON	2.2K	5%	1/4W		R910	1-249-422-11	CARBON	2.7K	5%	1/4W	
R805	1-249-435-11	CARBON	33K	5%	1/4W		R911	1-249-426-11	CARBON	5.6K	5%	1/4W	
R808	1-215-888-00	METAL OXIDE	220	5%	2W	F	R912	1-249-429-11	CARBON	10K	5%	1/4W	
R809	1-247-893-11	CARBON	390K	5%	1/4W		R913	1-247-863-91	CARBON	22K	5%	1/4W	
R810	1-215-888-00	METAL OXIDE	220	5%	2W	F	R914	1-249-437-11	CARBON	47K	5%	1/4W	
R812	1-249-421-11	CARBON	2.2K	5%	1/4W		R919	1-249-437-11	CARBON	47K	5%	1/4W	
R813	1-249-417-11	CARBON	1K	5%	1/4W	F	R921	1-249-437-11	CARBON	47K	5%	1/4W	
R814	1-249-381-11	CARBON	1	5%	1/4W	F	R922	1-247-807-31	CARBON	100	5%	1/4W	
R815	1-249-381-11	CARBON	1	5%	1/4W	F	R923	1-249-421-11	CARBON	2.2K	5%	1/4W	
R816	1-216-456-21	METAL OXIDE	820	5%	2W	F	R1200	1-249-425-11	CARBON	4.7K	5%	1/4W	
R817	1-216-456-21	METAL OXIDE	820	5%	2W	F	R1201	1-249-434-11	CARBON	27K	5%	1/4W	
R818	1-215-884-11	METAL OXIDE	47	5%	2W	F	R1202	1-249-389-11	CARBON	4.7	5%	1/4W	F
R819	1-535-143-71	LEAD, JUMPER (7.5MM)					R1203	1-249-421-11	CARBON	2.2K	5%	1/4W	
R820	1-249-403-11	CARBON	68	5%	1/4W		R1204	1-249-421-11	CARBON	2.2K	5%	1/4W	
R821	1-215-909-11	METAL OXIDE	47	5%	3W	F	R1205	1-249-428-11	CARBON	8.2K	5%	1/4W	
R822	1-215-868-00	METAL OXIDE	680	5%	1W	F	R1206	1-249-428-11	CARBON	8.2K	5%	1/4W	
R823	1-216-456-21	METAL OXIDE	820	5%	2W	F	R1207	1-249-413-11	CARBON	470	5%	1/4W	
R824	1-249-420-11	CARBON	1.8K	5%	1/4W		R1208	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R825	1-215-884-11	METAL OXIDE	47	5%	2W	F	R1209	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R826	1-247-752-11	CARBON	1K	5%	1/2W		R1210	1-249-413-11	CARBON	470	5%	1/4W	
R827	1-249-425-11	CARBON	4.7K	5%	1/4W		R1211	1-249-424-11	CARBON	3.9K	5%	1/4W	
R828	1-215-449-91	METAL	15K	1%	1/4W		R1212	1-249-424-11	CARBON	3.9K	5%	1/4W	
R829	1-214-907-00	METAL	56K	1%	1/2W		R1213	1-249-421-11	CARBON	2.2K	5%	1/4W	
R830	1-217-778-11	FUSIBLE	1K	5%	1W	F	R1216	1-249-413-11	CARBON	470	5%	1/4W	
R831	1-535-465-11	LEAD, JUMPER (5.0MM)					R1217	1-249-425-11	CARBON	4.7K	5%	1/4W	
R833	1-247-887-00	CARBON	220K	5%	1/4W		R1218	1-535-465-11	LEAD, JUMPER (5.0MM)				
R835	1-535-143-51	LEAD, JUMPER (20.0MM)					R1219	1-249-417-11	CARBON	1K	5%	1/4W	



The components identified by shading and marked Δ are critical for safety
Replace only with the part number specified.

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
< RELAY >				C1722	1-126-935-11	ELECT 470MF 20% 16V	
				C1723	1-161-830-00	CERAMIC 0.0047MF 500V	
RY600 Δ	1-755-018-11	RELAY		C1725	1-128-551-11	ELECT 22MF 20% 25V	
< SWITCH >				C1726	1-136-153-00	FILM 0.01MF 5% 50V	
S601 Δ	1-571-433-21	SWITCH, PUSH (AC POWER)		C1801	1-104-664-11	ELECT 47MF 20% 25V	
S801	1-572-707-11	SWITCH, LEVER		C1803	1-137-368-11	FILM 0.0047MF 5% 50V	
S900	1-692-979-21	SWITCH, TACTILE		C1804	1-126-964-11	ELECT 10MF 20% 50V	
S901	1-692-979-21	SWITCH, TACTILE		C1805	1-137-366-11	FILM 0.0022MF 5% 50V	
S902	1-692-979-21	SWITCH, TACTILE		< CONNECTOR >			
< SPARK GAP >				CN1716	*1-568-880-51	PIN, CONNECTOR 5P	
SG801	1-519-422-11	GAP, SPARK		CN1717	*1-568-881-51	PIN, CONNECTOR 6P	
SG802	1-519-422-11	GAP, SPARK		CN1718	*1-770-723-11	CONNECTOR, BOARD TO BOARD 8P	
< TRANSFORMER >				CN1719	1-568-878-51	PIN, CONNECTOR 3P	
LF600 Δ	1-431-402-11	TRANSFORMER, LINE FILTER		CN1801	*1-568-879-11	PIN, CONNECTOR 4P	
LF601 Δ	1-431-402-11	TRANSFORMER, LINE FILTER		CN1802	*1-568-878-51	PIN, CONNECTOR 3P	
< THERMISTOR >				< DIODE >			
T601 Δ	1-429-604-12	TRANSFORMER, CONVERTER		D1701	1-535-465-11	LEAD, JUMPER (5.0MM)	
T800	1-426-981-11	TRANSFORMER, FERRITE (PMT)		D1702	8-719-110-88	DIODE RD39ES-B2	
T803 Δ	1-453-269-11	TRANSFORMER ASSY, FLYBACK (NX-4511/U2B4)		D1703	8-719-110-88	DIODE RD39ES-B2	
T804	1-437-090-31	HDT		D1801	8-719-929-15	DIODE HZS9.1NB2	
T805	1-431-899-11	TRANSFORMER, HORIZONTAL LINEAR		< IC >			
< THERMISTOR >				IC1801	8-759-701-59	IC NJM78M09FA	
THP600 Δ	1-809-827-11	THERMISTOR, POSITIVE		IC1802	8-759-603-37	IC M5216P	
< CAPACITOR >				< COIL >			
*****				L1701	1-414-183-41	INDUCTOR 10UH	
*A-1644-091-A VM BOARD, COMPLETE				L1703	1-408-603-31	INDUCTOR 10UH	
*****				L1704	1-408-603-31	INDUCTOR 10UH	
4-382-854-01 SCREW (M3X8), P, SW (+)				< IC LINK >			
< CAPACITOR >				PS1801 Δ	1-532-605-91	LINK, IC 0.4A (ICP-N10)	
C1701	1-126-933-11	ELECT 100MF 20% 16V		< TRANSISTOR >			
C1702	1-126-933-11	ELECT 100MF 20% 16V		Q1701	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C1703	1-130-491-00	MYLAR 0.047MF 5% 50V		Q1702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C1704	1-107-640-91	ELECT 100MF 20% 160V		Q1703	8-729-017-05	TRANSISTOR 2SA1837	
C1705	1-107-638-11	ELECT 33MF 20% 160V		Q1704	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C1706	1-104-999-11	FILM 0.1MF 5% 200V		Q1705	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C1707	1-137-397-11	FILM 0.047MF 5% 100V		Q1706	8-729-017-06	TRANSISTOR 2SC4793	
C1708	1-137-364-11	FILM 0.001MF 5% 50V		Q1708	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C1709	1-137-364-11	FILM 0.001MF 5% 50V		Q1709	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C1710	1-102-959-00	CERAMIC 22PF 5% 50V					
C1711	1-126-157-11	ELECT 10MF 20% 16V					
C1720	1-107-667-11	ELECT 2.2MF 20% 160V					
C1721	1-137-397-11	FILM 0.047MF 5% 100V					

VM

K5

REF.NO.	PART.NO	DESCRIPTION	REMARK			REF.NO.	PART.NO	DESCRIPTION	REMARK		
< RESISTOR >						C264	1-136-495-11	FILM	0.068MF	5%	50V
R1701	1-249-397-11	CARBON	22	5%	1/4W F	C265	1-136-176-00	FILM	0.82MF	5%	50V
R1702	1-247-807-31	CARBON	100	5%	1/4W	C266	1-136-176-00	FILM	0.82MF	5%	50V
R1703	1-249-416-11	CARBON	820	5%	1/4W	C267	1-136-169-00	FILM	0.22MF	5%	50V
R1704	1-247-807-31	CARBON	100	5%	1/4W	C268	1-136-169-00	FILM	0.22MF	5%	50V
R1706	1-247-815-91	CARBON	220	5%	1/4W	C270	1-101-005-00	CERAMIC	0.022MF		50V
R1707	1-249-411-11	CARBON	330	5%	1/4W	C271	1-126-952-11	ELECT	1000MF	20%	35V
R1708	1-249-417-11	CARBON	1K	5%	1/4W	C272	1-126-952-11	ELECT	1000MF	20%	35V
R1710	1-249-403-11	CARBON	68	5%	1/4W	< CONNECTOR >					
R1711	1-249-403-11	CARBON	68	5%	1/4W	CN1303	*1-568-879-11	PIN, CONNECTOR	4P		
R1712	1-212-974-00	FUSIBLE	47	5%	1/2W F	CN1304	*1-568-879-11	PIN, CONNECTOR	4P		
R1713	1-249-452-11	CARBON	2.7	5%	1/4W F	CN1307	*1-564-511-11	PLUG, CONNECTOR	8P		
R1714	1-249-414-11	CARBON	560	5%	1/4W F	< IC >					
R1715	1-249-432-11	CARBON	18K	5%	1/4W	IC260	8-759-250-68	IC	TDA7264		
R1716	1-249-417-11	CARBON	1K	5%	1/4W F	< RESISTOR >					
R1717	1-216-476-11	METAL OXIDE	180	5%	3W F	R265	1-249-429-11	CARBON	10K	5%	1/4W
R1718	1-249-432-11	CARBON	18K	5%	1/4W	R266	1-249-429-11	CARBON	10K	5%	1/4W
R1719	1-249-383-11	CARBON	1.5	5%	1/4W F	R267	1-212-849-00	FUSIBLE	4.7	5%	1/4W F
R1720	1-247-696-11	CARBON	47	5%	1/4W F	R268	1-212-849-00	FUSIBLE	4.7	5%	1/4W F
R1721	1-249-414-11	CARBON	560	5%	1/4W F	R269	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1722	1-249-401-11	CARBON	47	5%	1/4W	R270	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1723	1-535-465-11	LEAD, JUMPER (5.0MM)				*****					
R1724	1-249-417-11	CARBON	1K	5%	1/4W						
R1725	1-249-417-11	CARBON	1K	5%	1/4W						
R1726	1-249-425-11	CARBON	4.7K	5%	1/4W						
R1727	1-249-427-11	CARBON	6.8K	5%	1/4W						
R1728	1-249-408-11	CARBON	180	5%	1/4W						
R1729	1-249-408-11	CARBON	180	5%	1/4W						
R1730	1-247-819-91	CARBON	330	5%	1/4W						
R1731	1-249-414-11	CARBON	560	5%	1/4W						
R1806	1-247-883-00	CARBON	150K	5%	1/4W						
R1807	1-249-429-11	CARBON	10K	5%	1/4W						
R1808	1-249-429-11	CARBON	10K	5%	1/4W						
R1809	1-249-429-11	CARBON	10K	5%	1/4W						
R1810	1-249-429-11	CARBON	10K	5%	1/4W						

*A-1649-022-A K5 BOARD, COMPLETE											

4-202-373-01 SPRING, IC											
4-202-710-01 SPACER, INSULATING											
< CAPACITOR >											
C261	1-136-173-00	FILM	0.47MF	5%	50V						
C262	1-136-165-00	FILM	0.1MF	5%	50V						
C263	1-136-495-11	FILM	0.068MF	5%	50V						

The components identified by shading and marked Δ are critical for safety
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REF. NO.	PART.NO	DESCRIPTION	REMARK	REF. NO.	PART.NO	DESCRIPTION	REMARK
		MISCELLANEOUS *****					
	Δ 1-406-807-11	COIL, DEMAGNETIZATION			*4-204-159-01	CUSHION (LOWER) (ASSY)	
	1-452-032-00	MAGNET, DISC: 10MM \emptyset			*4-204-158-01	CUSHION (UPPER) (ASSY)	
	1-452-094-00	MAGNET, ROTATABLE DISK: 15MM \emptyset			*4-042-476-01	BAG, PROTECTION	
	Δ 1-453-269-11	TRANSFORMER ASSY, FLYBACK (NA-4511/U2B4)				REMOTE COMMANDER	
	1-505-937-11	SPEAKER (10CM)				*****	
	1-505-952-11	SPEAKER			1-475-833-11	COMMANDER, STANDARD TYPE (RM-886)	
	Δ 1-571-433-21	SWITCH, PUSH (AC POWER)				*****	
	1-693-338-11	TUNER/VIF (AEP)	(KV-29FX11A/29FX11D/ KV-29FX11E/29FX11K/ KV-29FX11R)				
	1-693-340-11	TUNER/VIF (FR)	(KV-29FX11B)				
	1-693-339-11	TUNER/VIF (UK)	(KV-29FX11U)				
	Δ 1-765-286-11	CORD, POWER	(KV-29FX11A/29FX11B/ KV-29FX11D/29FX11E/ KV-29FX11K)				
	Δ 1-574-062-61	CORD, POWER (WITH CONNECTOR) (KV-29FX11R)					
	Δ 1-776-204-11	CORD, POWER (FILTER) (KV-29FX11U)					
	Δ 8-451-494-21	DELECTION YOKE (Y29RSA-M2)					
	Δ 8-453-011-11	NECK ASSY, NA299-M					
	Δ 8-735-041-05	PICTURE TUBE					
	1-452-896-11	COIL, NA ROTATION (RT200)					
	Δ 1-251-528-21	CAP ASSY, HIGH VOLTAGE					

		ACCESSORIES AND PACKING MATERIALS *****					
	4-204-202-41	MANUAL, INSTRUCTION (ITALIAN)	(KV-29FX11A)				
	4-204-202-51	MANUAL, INSTRUCTION (FRENCH/GERMAN/ITALIAN/DUTCH)	(KV-29FX11B)				
	4-204-202-11	MANUAL, INSTRUCTION (TURKISH/GERMAN/GREEK/ENGLISH)	(KV-29FX11D)				
	4-204-202-71	MANUAL, INSTRUCTION (SPANISH)	(KV-29FX11E)				
	4-204-202-81	MANUAL, INSTRUCTION (PORTUGUESE/FINNISH/DANISH/NORWEGIAN/SWEDISH)	(KV-29FX11E)				
	4-204-202-91	MANUAL, INSTRUCTION (CZECH/ENGLISH/POLISH/RUSSIAN/BULGARIAN/HUNGARIAN)	(KV-29FX11K/29FX11R)				
	4-204-202-61	MANUAL, INSTRUCTION (ENGLISH)	(KV-29FX11U)				
	*4-204-164-01	INDIVIDUAL CARTON					

